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The Modern University

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✦ Introduction

THIS little book is an outgrowth of three papers read in Boston at the annual meetings in December, 1949, of the American Historical Association. They interested Cornell University Press because of the light they throw on the strengths, confusions, and problems of contemporary higher education. The fourth piece was to be a brief, informal introduction, but because in paragraph two it jumped, somehow, to the twentieth century, it seemed awkward for historians to place it anywhere but at the end.

Paul Farmer is Associate Professor of History in the University of Wisconsin. Charles C. Gillispie is Assistant Professor of History in Princeton University. George W. Pierson is Larned Professor of History in Yale University. Together they trace the development through the nineteenth century and into the twentieth century of new functions of universities and of new and old ideas concerning the proper role of universities. They point out the conflict of concepts within and between generations and countries, the victories and compromises of the nineteenth century that determined the nature of early twentieth-century universities, and the problems that remain with us today.

MARGARET CLAPP

Wellesley College
June, 1950

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1

Nineteenth-Century
Ideas of the University:
Continental Europe



THE university, one of the most distinctive institutions of the western world, is an heir to the High Middle Age—to the twelfth and thirteenth centuries—and, thus, although a tradition of no more than eight centuries is not ancient in the whole view of the history of civilization, the university is as old or perhaps older than the national state or representative government.

To the Middle Ages the university owes the principal ideas which gave it origin and even now in the modern age state its purpose in broadest terms. The men of the Middle Ages established in the mind of the western world the principle that the preservation and perpetuation of theoretical knowledge is properly entrusted to a special institution—the *university* as we now use the word or the *studium generale* as the men of the Middle Ages spoke—an institution which is a permanent association of scholars and students and which is largely self-governing and mainly self-perpetuating.

Likewise to the Middle Ages the university owes the view that this institution ought to embrace the whole of knowledge other than traditional handicraft skills, that is, the esoteric learning necessary to human social life and necessary also to the highest development of man as a person. Thus in the medieval university the faculty

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of theology nurtured the sacred knowledge necessary to the care of the soul; the faculty of medicine attended to the learned knowledge necessary to the care of the body; the faculty of law took as its province the principled knowledge necessary to the management of organized social relations among men; and the faculty of arts provided the general knowledge prerequisite to these other specialized branches of the higher studies.

But the university as we know it is not the university as it arose in the High Middle Age. It owes as much to the eighteenth and nineteenth centuries as to the twelfth and thirteenth. In this much more recent period the institution took on new characteristics which make the modern university unlike the medieval, which have given the university much of its strength and grandeur in the modern European world, and which have also done much to reduce the university to its present eclipse in Europe.¹

The new idea of the university as it developed in continental Europe during the nineteenth century may be summarized in these three propositions: (1) the university is properly subordinate to the state; (2) the university serves properly as the voice of the national spirit or the mind of the nation; and (3) the university is properly dedicated to the increase of knowledge as its principal task rather than to the mere perpetuation of an inherited store of knowledge. These ideas gained greater ascendance in continental Europe than in Britain or America but prevailed to some degree throughout the European world.²

We will give attention first to the emergence of these new conceptions of the university—where they have

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their origin and how they manifested themselves in practice. Then we will attempt some assessment of these new conceptions against the historical background of the past century. For convenience, we will take the French, German, and Russian universities as representative of those in other countries of continental Europe.

The view that the university is properly associated with the state and in some manner subordinate to it appeared earliest among these new ideas. The movement toward this subordination began during the Late Middle Age,³ gained ground in the early modern period, and prevailed throughout continental Europe in the nineteenth century.

At its origin in the Middle Ages the university was an autonomous institution. It recruited its own members, both students and professors, set its own tasks, made its own regulations, and awarded degrees in its own name. To be sure, its independence was not absolute. The Christian church, which held undisputed dominion over the world of thought during the Middle Ages, imposed limitations upon the university. Yet this religious limitation did not represent an external pressure inasmuch as the doctrines of the Christian religion were freely accepted throughout Europe. In the definition of these religious principles, moreover, the university took a leading part, thus shaping these doctrines while submitting to them.

The medieval university owed its autonomous status to a corporate charter granted by authority of some secular or religious ruler. Often the university owed even its inception to the initiative of such a ruler and

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on occasion the king or prince or bishop who granted the charter interposed in its administration. But such outside intervention was not the rule. In the main the university operated on its own initiative and according to its own judgment.

In the modern period, however, the university in continental Europe lost all prescriptive right to independence. It became a part of the administrative structure of the state and kept a measure of self-rule only as a branch of the government and only on the sufferance of the higher authorities of the state. The government assumed the right to appoint the permanent members of the university and provided indispensable subsidies to help meet its expenses. No longer did the professors award degrees simply as testaments of their judgment but rather now as licenses of the government, providing the sole legal access to the practice of a profession or to higher levels in the civil service. No longer did the university set its tasks simply according to its view of the requirements of knowledge but rather according to the needs and interests of the state.

In Germany, the Protestant Reformation did much to hasten this movement.⁴ The Protestant princes generally assumed authority over the universities within their realms as they assumed headship over the Christian church within their principalities. The Catholic Counter Reformation worked to much the same result since in their struggle to check the spread of Protestantism the German Catholic princes assumed a stricter surveillance over the universities in the lands under their rule. Then in the seventeenth and eighteenth centuries, under the impulse of the general principles of Enlightened Des-

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potism, the German princes took a still more active interest in universities.

This cameralist paternalism was evident, for instance, in the establishment of the universities of Halle (1694) and Göttingen (1734), which gained pre-eminence among the German universities in the Age of the Enlightenment. From the outset these universities operated as agencies of the state under close supervision of the government. Likewise, the three great Prussian universities—Berlin (1810), Breslau (1811), and Bonn (1818)—arose at the initiative and under the management of the Prussian state, to become the model for other German universities in the nineteenth century, giving new prestige to the principle of state support and state supervision.

In France, the universities remained autonomous, in the main, throughout the Old Regime,⁵ but they sank into somnolence in the sixteenth, seventeenth, and eighteenth centuries. During the Age of the Enlightenment public opinion began to look forward to their reform and reorganization under the auspices of the state. On the outbreak of the French Revolution the successive representative assemblies deliberated the reform of universities and of public education in general, wholly upon the premise of the supreme responsibility of the state in this sphere.

In 1793, as a prelude to such a reorganization, the universities of France were abolished at one stroke. But not until 1806, when the Emperor Napoleon set up the *Université de France*, was higher education reconstructed as a whole. Under this new scheme the old universities were not restored, but separate faculties

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were organized under the auspices of the state in the several branches of higher education, and the entire structure of public education at all levels was put under the supervision of the government. This new regime of state supervision of public education proved permanent.

In Russia, the university owed its origin to the initiative of the state and from the outset developed as a creature of the government.⁶ No university arose until the Empress Elizabeth set up the University of Moscow in 1755. Russia acquired its second such institution, the Polish-Lithuanian University of Vilna, as a consequence of its share in the First Partition of Poland in 1772. In addition, the Emperor Alexander I set up the Universities of Kharkhov (1804), Kazan (1804), and St. Petersburg (1819).⁷ From the start these and the other Russian universities instituted subsequently in the nineteenth century operated as agencies of the state. Thus in Russia the university conformed to the pattern of subordination to the state without even the remembrance of a previous autonomous status as an institution dedicated solely to the service of knowledge.

What brought about this subordination of the university to the state? It was not the outcome of a movement to revise the relations between the state and the university in particular. Rather it was an aspect of the whole broad movement toward *étatisme* which prevailed throughout Europe in the modern period. The state took over responsibility for higher learning much as it had taken over responsibility for maintaining social order in the Late Middle Age by suppressing private jurisdiction and private warfare, as it had taken over responsibility for settling religious issues in the age of the Protestant

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Reformation and the Catholic Counter Reformation, and as it took over responsibility for nurturing economic welfare in the age of mercantilism. This movement was a particular application of the general principle of the welfare state as this principle developed in the Old Regime and emerged triumphant after the French Revolution.

Associated with this movement to make the university an agency of the government was the new view of the university as the embodiment of the national mind. This new conception developed as the product of two separate movements. One of these was the growth of the consciousness of the nation as the basic community among men. The other was the new identification of the learned world with the university.

In the nineteenth century, as the new sense of the absolute and supreme importance of the nation gained ascendance, Europe conceived of the nation as expressing itself in the realm of action by means of the national state. In much the same manner it conceived of the nation as expressing itself in the world of spirit by the agency of the university. It looked to the university to serve this purpose, rather than to some other institution, because in the nineteenth century Europe identified the world of thought with the world of the universities.

Europe had not always made this identification. In the Middle Ages, to be sure, the university had won recognition as the repository of the whole of human knowledge at its highest level. Since the Late Middle Age, however, universities had lost this high rank. In the sixteenth, seventeenth, and eighteenth centuries universities had become little more than technical or vocational schools

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for the learned professions of law and medicine. In the broader world of thought they had slipped into a minor and almost negligible role. Some of the Italian universities in the sixteenth century, the Dutch in the seventeenth century, and the German in the eighteenth century had shown some vigor. But the rest had sunk into torpor. Such men as Bacon, Descartes, Spinoza, Leibniz, Hobbes, Locke, Newton, Boyle, and Lavoisier had had little or no association with universities.

In the Old Regime the learned world was identified with "society" rather than the university, that is, with the world of gentlemen of birth and breeding. This equivalence was the consequence of a number of developments in the social and intellectual history of western Europe which may be summarized generally though inadequately and somewhat inexactly as follows.

At the outset of the modern period, as a consequence of the rise of the state to supreme political power, the hereditary nobility in Europe was reduced to a landlord leisure class. The landed aristocracy was shorn of political responsibilities while privileged to retain an immense economic endowment and high social rank. At the same time, as a consequence of the cultural revolution associated with the Renaissance, the landed aristocracy in much of northern and western Europe—notably in France, England, and Germany—accepted the refinement of thought and taste as one of the marks of a gentleman. Generally, though by no means universally, the gentleman of the seventeenth and eighteenth centuries sought to present himself as a man of learning as well as a man of wealth and an heir to a name.

In this period the bourgeoisie also in some measure

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accepted the refinement of thought and taste as an aspiration. In a society where high social prestige depended primarily upon birth and breeding, the bourgeois found that the wealth which he might acquire would not in itself assure him welcome among gentlemen but that intellectual attainment, despite humble birth, would sometimes win such acceptance. This circumstance—the adoption by the landed aristocracy of some measure of learning and a discriminating appreciation of the arts as marks of the gentleman, and the aspiration of the bourgeoisie to win higher social regard by such attainment—did much to make the seventeenth and eighteenth centuries an age of remarkable vigor and accomplishment in thought and the arts. This circumstance, together with the inner decay of the university, helped make gentlemanly society, rather than the university, equivalent to the learned world.

In the nineteenth century, however, the circumstances which had previously made “society” identical with the learned world no longer obtained. After the outbreak of the French Revolution and during the period of social upheaval which ensued, the hereditary nobility was put upon the defensive in regard to the privilege associated with birth and was made to think of intellectuality as a Pandora’s box of social revolutionary mischief. Earlier, in the age of Louis XV or Catherine the Great the aristocracy might dabble in the ideas of the Enlightenment; but in the age of Louis XVIII or Nicholas I gentlemen of birth had quite another preoccupation. Meantime, the bourgeoisie of the nineteenth century developed other aspirations than seeking admittance into the society of the nobility. The intellectuals among

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the bourgeoisie now took up a social and political and ideological struggle against the hereditary nobility as a better means to their advancement, while the businessmen among the bourgeoisie set themselves to the vast new tasks of economic expansion which the industrial revolution presented.

In such a situation, as the upper classes outside the universities gave less heed to the polite interest in learning and as the universities themselves awoke to new vigor in consequence of an inner regeneration, the university in the nineteenth century regained the high rank it had held in the Middle Ages as the prime repository of human knowledge. And, as the nation superseded mankind in the consciousness of Europe, the university acquired an altogether new role as the embodiment of the national mind.

This new role was strikingly apparent in Russia.⁸ In the eighteenth century the government had introduced the university into Russia as part of the westernizing reform movement, in order to overcome the general intellectual backwardness of Russia as well as to provide trained personnel for the service of the state. In the nineteenth century, however, the Romanov government under Alexander I and Nicholas I built up the Russian universities as a means of checking westernization and buttressing the distinctive Slavic character of Russia.

Unless the government developed universities in Russia, the Romanovs discovered, it would have to permit students to go abroad to universities elsewhere in Europe in order to obtain indispensable instruction at higher levels, and it would have to engage foreigners as teachers in the schools of Russia. But then students would be ex-

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posed to the ominous liberal intellectual movements which prevailed at that time in western European thought. Instead, the government undertook to increase the number of universities in Russia and to strengthen them, but at the same time to make them into a bulwark of "autocracy, orthodoxy, and nationality."

In accord with this purpose the University of Vilna was suppressed after the Polish insurrection of 1830-1831, and the University of St. Vladimir was founded at Kiev in 1833 so as to buttress Russian nationalism against the rise of Polish and Ukrainian nationalism. Other signs of the same purpose were measures obliging all students to take courses in the history and theology of the Orthodox Church, suppressing chairs in western public law and philosophy, and making lectures censorable in advance.

In Germany throughout the nineteenth century the university well served its new role as the organ of national consciousness. The University of Berlin, which held the vanguard in the resurgence of German universities, owed its origin in 1810 to the conscious purpose of its founders to demonstrate that the German national spirit remained unbroken despite the humiliation of the German people in the realm of power at the hands of Napoleonic France.

As the new aspiration toward national unification gained ground during the early nineteenth century, the German universities served as the principal witness to the unity of *Deutschtum* and the principal link among the dozens of German states. Only in the universities did natives of diverse German states meet and work together with no distinction of citizenship. As a conse-

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quence, students and professors became heralds of German national unity. Student associations such as the *Burschenschaften* led the protest against the spirit of Metternichism, while the "Professors' Parliament" at Frankfort in 1848 made the first overt attempt to organize a German national state.

Neither the professors nor the students accomplished the mission of national unification. Once Bismarck had achieved this task, however, the German universities became proud servants of the new German Empire. In this Hohenzollern Empire the instruments of German greatness, so the Germans believed—and their neighbors, too—were the schoolmaster, the bureaucrat, and the army officer. The German universities took pride in their work of producing the schoolmasters and the bureaucrats and even providing the reserve officers for the army.

Higher education in France took on much the same character.⁹ Throughout the nineteenth century, under the regime inaugurated by the Napoleonic *Université*, the secondary schools overshadowed the higher faculties, which were not reconstituted as universities until 1896. But the Revolutionary and Napoleonic principle that the government must hold the reins over the whole of public education, at the higher levels as well as at primary and secondary, persisted under monarchist and republican regimes alike.

The legitimists, though bitter in their diatribes against the Revolution and Bonapartism, made no serious attempt to liberate education from the surveillance of the state. To be sure, Louis XVIII abolished the *Université* in 1814, but Napoléon, upon his return to power during the Hundred Days, re-established it and the

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Bourbon regime did not abolish it again after the Second Restoration. Nor did the liberal monarchists under Louis Philippe. Even the republicans of 1848, despite their professed attachment to freedom of teaching, did not emancipate higher education. All parties agreed that the state must keep the mind of the nation pure, no matter how much these parties disagreed as to what were "pure" principles.

In addition to the new view of the university as the instrument of the omnipotent state and as the voice of the nation, the nineteenth century also brought forth the view of the university as an institution dedicated to a search to widen the bounds of knowledge rather than merely to preserve the store of knowledge undiminished from generation to generation. It was in this respect that the German universities won their undisputed pre-eminence in the nineteenth century.¹⁰

This new emphasis involved the conception that the professor was primarily a research scholar; that the university student properly took some share with the professor in his researches; that the faculty of philosophy, as the guardian of "pure" rather than practical knowledge, ranked highest among the branches of the university; that the faculties of medicine and law, formerly the most vigorous members of the university, ranked much below the faculty of philosophy because their studies involved professional or utilitarian applications of knowledge; and that the faculty of theology probably did not belong in the university because it regarded its branch of knowledge as fixed and final.¹¹

This sense of the purpose of the university had begun to appear early in the eighteenth century in the universi-

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ties of Halle and Göttingen. It emerged in the field of the humanities, as we now use that term, before it penetrated into the natural sciences. In the humanities the new interest in research was signaled by the introduction of the seminar into the study of philology and then into the study of history. In the natural sciences it was perhaps first bespoken by Justus von Liebig, whose laboratory at the University of Giessen set the pattern for scientific research as a function of the university. From their origin the three great new Prussian universities of the nineteenth century—Berlin, Breslau, and Bonn—adopted the idea of the university as a research institution as well as an institution of higher education. This view prevailed throughout the German universities before 1850 and won acceptance before 1900 in most of the countries of continental Europe.

What gave rise to this view of the university as the vanguard of research? No single simple answer appears. In the nineteenth century the conception gained much strength from the impressive record of new achievement in the natural sciences. Yet it had begun to develop before the nineteenth century and it appeared in the humanities before the natural sciences. Doubtless it owed much of its inspiration to the Enlightenment when the new strides in all branches of thought demonstrated that knowledge is not static but is capable of immense growth.

It is remarkable that in the German universities of the eighteenth and nineteenth centuries, where the view first appeared, speculative philosophy preceded an interest in scientific investigation. Does this not suggest some debt, also, to the Protestant Reformation? Was not

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this speculative philosophy a secularized theology? Do not the German philosophers such as Wolff, Kant, Fichte, Schelling, Schleiermacher, and Hegel seem to seek a kind of personal justification in an absolute truth, though outside the bounds of Christian doctrine, much as Luther sought to know the word of truth in order to be saved? Even the Germanic zeal for scientific research in the nineteenth century seems to suggest a religious ardor, a quest for answers which overreaches secular rationalism.

Such were the principal new ideas of the nature and role of the university as developed in continental Europe during the early nineteenth century. What assessment shall we make of them from the vantage point of the middle of the twentieth century?

The new conception of the university did much, we must acknowledge, to maintain a high regard for learning and the search for knowledge during the nineteenth century. During the Old Regime Europe could, and did, virtually dispense with the university without serious harm to the world of thought. In the nineteenth century, however, Europe could not have done so. At a time when the hereditary aristocracy of Europe began to pass into decadence and the new bourgeois magnates of the industrial revolution made the accumulation of wealth the sole road to honor, the university provided the one refuge where knowledge meant merit and where, without it, neither birth nor wealth brought honor. So the university performed an indispensable service to the world of thought.

Perhaps also the university provided some cosmopolitan refuge from the rising tide of nationalism. To be sure,

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the university did not strive against the new spirit of nationalism. Rather it was regarded as an organ of the nation and its members were pleased to accept their new role as servants of the nation. Yet nationalism won its major triumph over education mainly at lower levels than the university. In his new devotion to research the university scholar kept some sense of the international brotherhood of science. Not until the twentieth century did the European universities begin to lose sight of the broader world of knowledge which reaches across national boundaries.

But the new role of the university also involved some much more dubious consequences. The nineteenth century, as we have noted, made the learned world equivalent to the world of the universities. But in its stewardship of knowledge the university did much to accentuate the trend toward the specialization and socialization of knowledge. And this, together with the surrender of the university to the nation-state, helped to undermine the independence of the world of knowledge.

Through the Age of the Enlightenment, despite a movement even then toward specialization of knowledge, the learned man was the man who had mastered the sum of human knowledge or had at least striven to master it. By the end of the nineteenth century, however, the learned man was one who had mastered but a single department of knowledge or perhaps had done no more than to make a single contribution to one branch of knowledge.

This trend toward specialization was not due solely to the influence of the university. It arose in part as a

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consequence of the immense increase in the store of known empirical data, so that no longer could anyone reasonably hope to master the whole of knowledge. It arose in part also as a consequence of a logical progression in philosophical thought from the British empiricists of the seventeenth and eighteenth centuries to the positivism and pragmatism of the nineteenth and twentieth centuries, which produced the view that knowledge consists of only the data of sense perception and that principles, save as summaries of such data, are but empty words.

Yet in some measure this process of specialization was a consequence of the new identification of learning with the university and the new emphasis upon an unremitting struggle to acquire new knowledge. In accepting research as its principal task the university had little choice but to accept also the departmentalization of knowledge, since in practice research had to be undertaken on the basis of some systematic division of labor among the members of the university. And because in the society of nineteenth-century Europe learning became the specialized vocation of the university scholar, the learned man became equivalent to the research scholar.

Specialization meant also the socialization or nationalization of knowledge. Knowledge as a whole became an attribute of society as a whole and therefore—in the context of nineteenth-century Europe—an attribute of the nation. No longer was it an attribute of the individual. The university in continental Europe was held responsible as an agent of the nation-state for husbanding the store of knowledge. But neither the university as a whole nor its members—students and professors—were held

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responsible for education understood as the formation of personality and character, or as adjustment—at the highest level and on a personal basis—between the individual and his environment. In this respect the European universities stood in marked contrast to the English universities of Oxford and Cambridge and to the American colleges of the nineteenth century.

We do not have here to decide in principle the merit of the one view as against the other. We must, however, note an ominous consequence of the new view of the university which became apparent in the twentieth century. The European university, as reconstructed in the nineteenth century under German leadership, by accepting service to the nation-state as its task and by relegating to the background its responsibility to the individual, gave up its independence. For once the state should determine the interest of the nation as its supreme representative, the university, as a servant to the nation, subordinate to the state, would have no choice but to accept this determination. Nor would it have a basis on which to urge its responsibility as tutor to the individual as against its duty of service to the nation.

This consequence was not grossly apparent in the nineteenth century. As time passed governments made less and less use of their right to intervene in the affairs of the universities, though never acknowledging a principle of absolute academic freedom.¹² Two circumstances favored the universities in this respect. One was that the students and professors alike, on their own impulse, espoused the general principles of liberalism and nationalism and eventually most governments in Europe acquiesced in these principles. So the state and the uni-

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versity had much the same mind. The other circumstance was that the principles of liberalism, which won wide though never universal acceptance, gave sanction to academic freedom as well as other civil and political liberties. Thus governments permitted some measure of dissidence in the universities just as even the most autocratic of them permitted what now seems a wide measure of political opposition.

In the twentieth century, however, these circumstances no longer safeguarded the universities. With the rise of totalitarianism after the First World War governments have espoused new principles, inimical to the interests of the university as the repository of knowledge and the guardian of free inquiry, and governments have no longer hesitated to suppress academic freedom or other civil and political liberties. And now, as governments have sought to impose their will upon the universities, nowhere in Europe have the universities made a serious struggle to resist their enslavement.¹³ This surrender has not been simply a surrender to superior power. In some measure it has been the consequence of a previous surrender in principle, for the universities of continental Europe, in view of the role which they have willingly accepted since the nineteenth century, have had little ground on which to defend their right to a mind of their own.

Thus the new idea of the university, as it developed in continental Europe during the nineteenth century, helps to explain the new grandeur of the European universities during that period. But it also helps to explain their present eclipse in the twentieth century. And, because the academic world is now almost identical with

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the learned world, the eclipse of the university now means darkness upon the whole world of thought.

NOTES

1. The basic standard work on European universities, covering Europe as a whole and treating the modern period as well as the Middle Ages, is Stephen d'Irsay, *Histoire des universités françaises et étrangères*, 2 vols. (Paris, 1933). The most notable general histories of European universities in the Middle Ages are Hastings Rashdall, *The Universities of Europe in the Middle Ages*, originally published in 1895 but newly edited by F. M. Powicke and A. B. Emden, 3 vols. (Oxford, 1936), and Fr. Heinrich Denifle, *Die Entstehung der Universitäten des Mittelalters bis 1400* (Berlin, 1885). Studies of universities in particular countries are mentioned below.

2. Another view might be mentioned, along with these three, as part of the new idea of the university in the nineteenth century: the university ought to recognize no distinction between "pure" knowledge and practical or technical knowledge and ought therefore to undertake general service to the community, rather than only intellectual pursuits, as part of its task. This view, now widespread in the United States and some other countries, has antecedents in Europe in the eighteenth and nineteenth centuries; but it did not win wide acceptance in continental Europe during the nineteenth century and it is not treated here. Nor did Europe generally in the nineteenth century adopt the view that the university ought properly to provide education at the highest level for the whole people. Some such view has won attention in Europe in more recent times, however. See, for instance, José Ortega y Gasset, *Mission of the University* (Princeton, 1944).

3. D'Irsay, *Histoire des universités*, I, 191ff., 197ff., 302ff.

4. D'Irsay, *Histoire des universités*, I, 302f.; Friedrich Paulsen, *Geschichte des gelehrten Unterrichts auf den deutschen Schulen und Universitäten vom Ausgang des Mittelalters bis zur Gegenwart*, 2 vols. (3d ed.; Leipzig, 1919), I, 179ff., 255ff., 398ff. Other studies of German universities include Friedrich Paulsen, *The German Universities: Their Character and Historical Development* (New York, 1895); Eduard Spranger, *Wandlungen im Wesen der Universität seit 100 Jahren* (Leipzig, 1913); James M. Hart, *German Universities: A Narrative of Personal Experi-*

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ence (New York, 1894); Matthew Arnold, *Higher Schools and Universities in Germany* (London, 1874); Heinrich von Sybel, *Die deutschen Universitäten: Ihre Leistungen und Bedürfnisse* (Bonn, 1874); J. J. I. von Döllinger, *Die Universitäten sonst und jetzt* (2nd ed.; Munich, 1871); F. C. Savigny, *Wesen und Werth der deutschen Universitäten*, in *Vermischte Schriften*, 5 vols. (Berlin, 1850), IV, 270–308. A perceptive recent essay is Frederick Lilge, *The Abuse of Learning: The Failure of the German University* (New York, 1948).

5. D'Irsay, *Histoire des universités*, II, 127ff. See also, on higher education in France generally in the nineteenth century, Alphonse Aulard, *Napoléon Ier et le monopole universitaire* (Paris, 1911); Georges Weill, *Histoire de l'enseignement secondaire en France: 1802–1920* (Paris, 1921); Paul Boyer and others, *La Vie universitaire à Paris* (Paris, 1918).

6. T. Darlington, *Education in Russia* (Great Britain, Board of Education, *Special Reports on Educational Subjects*, Vol. XXIII; London, 1909), ch. i; Nicholas Hans, *History of Russian Educational Policy: 1701–1917* (London, 1931), ch. i; T. G. Masaryk, *The Spirit of Russia: Studies in History, Literature, and Philosophy*, 2 vols. (London, 1919), I, 104–128.

7. The University of Dorpat, founded by Baltic Germans in 1802 with the sanction of Alexander I, was more a German institution than a Russian since most of the professors and students were German, as was the language of instruction.

8. Darlington, *Education in Russia*, pp. 55–60; Hans, *Russian Educational Policy*, pp. 75–91; Alexandre Koyré, *La Philosophie et le problème national en Russie au début du XIXe siècle* (Paris, 1929).

9. D'Irsay, *Histoire des universités*, II, 229–245, 261f. See also Georges Cogniot, *La Question scolaire en 1848 et la loi Falloux* (Paris, 1948).

10. To designate the emphasis upon research as a characteristic of the modern university does not mean that universities in the Middle Ages did not extend the bounds of knowledge nor that they did not recognize intellectual problems to be solved. Yet the medieval university did not regard research in the modern sense as its principal task.

11. For representative expressions of these views see Hart, *German Universities*, or Abraham Flexner, *Universities: American, English, German* (New York, 1930).

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12. This does not mean that the principle of academic freedom won no recognition in the nineteenth century. University professors, especially in Germany, strongly bespoke the principle, and some governments made obeisance to it; so, for example, the Prussian constitution of 1850 guaranteed, though in vague terms, freedom of scientific thought (*Wissenschaft*) and the teaching of it. For a representative statement of the principle of academic freedom and a brief account of its development in Germany, see G. Kaufmann, *Die Lehrfreiheit an den deutschen Universitäten im neunzehnten Jahrhundert* (Leipzig, 1898). But even in German universities, where the professors prided themselves on their academic freedom, the universities depended, as the safeguard of their freedom, mainly upon the right of professors and students to move from one university to another and the right of the professors to augment the staff of the university at their own discretion by appointments to the rank of *Privatdocent*. The universities did not win or even seriously demand an absolute freedom to manage their own affairs without outside supervision.

13. One must recognize that some number of European professors in this generation have taken a personal stand against totalitarian principles at great personal hazard and that a number have chosen the hard road of exile rather than submit to a totalitarian regime. Nonetheless, in a broad assessment, one must also acknowledge that the universities of Europe have succumbed to totalitarianism without major resistance. For instance, the Nazi regime in Germany had need to disturb no more than about one-tenth of the whole number of university professors in order to accomplish its purposes; see E. Y. Hartshorne, *The German Universities and National Socialism* (Cambridge, Mass., 1937).

English Ideas of the University
in the Nineteenth Century



‡ Charles C. Gillispie *

OXFORD and Cambridge over the centuries have traveled as far from their medieval origins as have the European universities. Since the Reformation, however, they have done so more gradually, retaining wherever possible the picturesque externals and ceremonial formalities with which they flavor their traditions.

In England as on the continent the intellectual vitality of the universities reached its lowest ebb during the Age of the Enlightenment, when the world of science, literature, and the arts lay almost entirely outside their walls. It is possible that the familiar picture of academic torpor in eighteenth-century England, confirmed though it is by the accounts of people as dissimilar as Edward Gibbon, Adam Smith, Lord Chesterfield, and Lord Eldon, has been drawn a little too dark and that it should be touched up here and there with occasional gleams of light and a few real flashes of mental energy. Nevertheless, it would be difficult to show that Oxford and Cambridge at the opening of the nineteenth century gave rise to any real ideas about a university.

The only important thing then coming out of the English universities was the English governing class, and it emerged less the product of education than of a sort of molding process in which the universities finished

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what the public schools had begun. The single profession for which Oxford and Cambridge pretended to prepare students was the church, but even in theology the formal training was of the sketchiest kind. Law and medicine were in even worse case, and indeed the three higher faculties had become shadows and their degrees formalities. As Sir William Hamilton wrote, without much exaggeration:

England is the only Christian country, where the Parson, if he reach the University at all, receives the same minimum of Theological tuition as the Squire;—the only civilized country, where the degree, which confers on the jurist a strict monopoly of practise, is conferred without either instruction or examination;—the only country in the world, where the Physician is turned loose upon society, with extraordinary and odious privileges, but without professional education, or even the slightest guarantee for his skill.¹

Regular tuition was offered only in the lowest faculty, that of arts, and in Oxford this meant chiefly classics, in Cambridge mathematics. Instruction was generally of a perfunctory sort, given not by the professors, who were university officers and at whose infrequent lectures the attendance was almost always small and often non-existent, but by tutors who conducted recitations in the colleges. The colleges, originally no more than residential foundations, had survived in England, as they had not on the continent; and, far more richly endowed than the parent corporations, they had gradually and largely by chance arrogated to themselves almost all the functions of the university except the granting of degrees. "Alma Mater," commented the Royal Commission of 1922, "had been devoured by her own children."²

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Nor, in the absence of professional training, did the universities or the colleges encourage devotion to scholarship or the advancement of learning—there was no notion that these pursuits were the business of the universities. If a research scholar was occasionally to be found at either one of them, it was a happy accident rather than the result of any policy. So far as Oxford and Cambridge were dedicated to anything, it was to the perpetuation of themselves and of the type of graduate formed by their peculiar social environment—though even this was simply what they in fact did rather than a consciously formulated aim.

By the end of the nineteenth century matters were on a very different footing. In place of the 741 Oxford undergraduates of 1800, there were over 2,500 in 1900, and at Cambridge the enrollment had grown from 387 to almost 2,800. No longer were degrees available only to members of the Church of England. Nor were they simply formalities to be approached through classics or mathematics. The old courses retained great prestige in 1900, but there were now eight honor schools at Oxford and twelve triposes at Cambridge embracing the natural sciences, the social sciences, and modern literatures and languages. Seventy-five per cent of the graduates took honors.

The professorial body had grown in proportion to the expansion of studies and the increased number of students. Its members were no longer holders of ill-paid sinecures. They were now overworked—though still ill-paid—and their lectures had a real place in the education of undergraduates. College fellowships had not increased in number. But in 1800 they had been comfortable livings for celibate clergymen, a few of whom

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were tutors, but most of whom did nothing. In 1900 the majority of resident fellows gave individual tutorial instruction, and most of the remainder, who were now permitted to marry, were on limited tenures engaged in scholarship or preparing for a professional career. Both fellowships and scholarships were open to merit instead of being hedged about by a tangle of local preferences and religious restrictions.

The commanding importance of the colleges was still the major institutional factor which made the system and atmosphere of Oxford and Cambridge unique among European universities, but the colleges had been subordinated in a federal manner to the authority and functions of the universities as a whole and had even been forced to contribute funds to their support.

And, finally, Oxford and Cambridge no longer enjoyed a monopoly. Eight faculties and twenty-four member colleges and institutes of the University of London, linked together and incorporated as a teaching body in 1900, were soon to surpass them as centers of research and instruments of large-scale education. Besides London, there was Durham, founded in 1833, a church university with which were associated a medical school and a school of science in Newcastle. Of the more recently established university colleges, Mason College in Birmingham was raised to the status of a university in 1900. Similar foundations had been established in Manchester, Liverpool, Leeds, Sheffield, Reading, Nottingham, Southampton, and Bristol.

They were not as yet empowered to award degrees; those were conferred by the University of London primarily, or by Victoria University, a sort of academic

holding company which had been incorporated in 1880 as the degree-granting authority first for Owens College in Manchester and, a few years later, for the Liverpool University College and the Yorkshire College in Leeds. At the turn of the century these three colleges, following the example of Birmingham, were on the verge of setting up as full-fledged independent universities. In Manchester alone there were about a thousand students at Owens College in 1900; and, if these civic institutions had at first to concentrate chiefly on technical and professional training, their development, like that of the University of London, was certain to enlarge the facilities for research and scholarship in England and to increase the opportunities for higher education.

These nineteenth-century changes were enormous, and, though some of them were initiated by the older universities themselves, they were effected chiefly as a result of public demand brought to bear in the press, in the political arena, and in Parliament. In the eighteenth century what now seem the glaring scandals tolerated at Oxford and Cambridge were simply examples of the venal condition of most established institutions in that period. "The unreformed House of Commons," wrote Mark Pattison, rector of Lincoln College in Oxford, was "an assembly of gentlemen whose sympathies were always with us." ³ In the nineteenth century, following the reform of Parliament itself, it was inevitable that the universities should not have been spared by the social developments, the political forces, the economic interests, the shifting class relations, and the intellectual and religious influences which modernized the whole fabric of the nation.

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Life in Oxford and Cambridge was one of the experiences which helped form the attitudes of the upper classes. Nevertheless, the universities reflected rather than led the major movements of opinion in Victorian England. Until fairly late in the century, the important figures in English intellectual history were for the most part outside the academic fold (with the exception of the leaders of the Oxford Movement), and, although the universities were intimately tied up with the life of the society of which they formed a part, the connection was less simple than in countries where they were government controlled.

In their relationship to the state, the English universities stood midway between continental universities of the nineteenth century and private universities in the United States. Oxford and Cambridge and all of the colleges within them were corporate bodies with the power to regulate their own affairs and manage their own property within the limits imposed by statute, by their charters, and by various provisos in the wills of benefactors who had directed how particular endowments were to be employed. The newer universities were in a similar position. They owed their origin to private philanthropy combined with civic enterprise, and not to the state.

But neither were English universities altogether independent of the sovereign political authority. Oxford and Cambridge were themselves represented in Parliament. Appointment to a number of chairs and college headships was vested in the Crown, and the salaries of a few of the professorships were a charge upon the Treasury. And beginning in 1889, the Committee of Council on Education was authorized to divide an an-

nual subsidy among the newly established university colleges, a sum which, though still only £25,000 in 1900, was growing steadily larger.

After the First World War even Oxford and Cambridge swallowed their pride in order to participate in the government grants. And entirely apart from financial questions, the universities, like all English institutions, were subject to the ultimate authority of Parliament, which could always exercise supreme jurisdiction by means of Royal Commissions and legislative enactments. In practice, however, the universities were left free to administer their own concerns except on the few—though decisive—occasions when the government, usually in response to public pressure, intervened to reform their constitution and define their obligations.

By the time of the Parliamentary Reform Bill of 1832, three major currents of opinion had converged in criticism of Oxford and Cambridge—utilitarianism, liberalism, and enthusiasm for natural science. Because the universities were a kind of *ancien régime* in academic microcosm, abounding with anachronisms and charm, Benthamite radicals were bound to attack them. The utilitarian ideal of a university took shape in the plans for the London University, renamed University College when the first attempt to secure a charter carrying authority to award degrees was obstructed by Tory and clerical influence.

This institution, an entirely secular establishment, opened its doors in 1828, and together with King's College, a competing venture founded a few years later under Church of England auspices, formed the nucleus

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around which the University of London eventually developed. At University College no time was to be wasted on dead languages or collegiate atmosphere. Instead, large classes were to be offered efficient lectures on good solid subjects related to the real world of commercial and professional life. As it turned out, the majority of students elected courses leading to medicine and law.

Unlike utilitarians, who had no use at all for Oxford and Cambridge, Liberals undertook to reform rather than to supersede the existing universities, and their emphasis was political rather than intellectual. They were less critical of Oxford and Cambridge as places of education than as citadels of privilege. Liberal ideas about the content of higher education were never very clear. But the advantages of it, whatever they might be, should go to those who could win them in "unfettered and open competition"—this, according to the Cambridge commissioners of 1850, was "the one good rule." ⁴

The intolerable aspect to Liberals was not so much the study of useless classics, as the tissue of restrictions surrounding fellowships and scholarships, the clerical oligarchy which governed the universities in the interest of the colleges, and the whole apparatus of religious tests. The complete secularism of University College in London was the pattern followed later in the century in the foundation of the provincial universities, but the destruction in 1871 of the Anglican monopoly of the resources of Oxford and Cambridge was primarily the consequence of Liberal political principles and Liberal political pressure. In this, of course, Liberals were joined by the dissenting interest, but Nonconformist ideas of education were always complicated by their hostility

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both to the Church of England and to secularist institutions of learning.

The third main line of criticism arose because the traditional curriculum had not changed despite the growth and increasing social importance of science and technology, the social sciences (particularly political economy), and the medical and legal professions. In view of the achievements and prestige of physical science, the almost total neglect of all its branches in the universities seemed their most glaring omission, and scientists tended to take the lead in demanding that Oxford and Cambridge should offer instruction in science and in all the modern intellectual and professional disciplines. In 1850 parliamentary Liberals secured the appointment of the first Royal Commissions on the universities. By then the campaign of utilitarians, Liberals, dissenters, scientists, and many professional men, manufacturers, and businessmen of the Manchester School variety had created a fairly definite radical ideal of higher education, which, though not fully developed by any one of these groups, may be abstracted from the discussion and summarized in a few sentences.

These critics of Oxford and Cambridge held that the universities belonged to the nation—a point which, denied by their defenders before 1832, was generally admitted by 1850—and that they must not, therefore, be closed to all but members of the established church and the aristocratic class. They must perform a service to the country commensurate with their huge endowments. The business of a university was to supply instruction, to require hard work, and to grant degrees which would be trustworthy evidence of the holder's

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achievements and ability. The curriculum should meet practical needs, and the graduate should be prepared to advance commerce, manufacturing, or agriculture, to enter public service, or to be a physician, lawyer, engineer, teacher, or scientist. Narrow specialization was not desired, but general knowledge should be taught through subjects relevant to the means by which the country was governed and the enterprises by which it lived: science, with emphasis on applied rather than pure science; political economy; modern law; geography and modern history; modern languages; theology; and moral and political philosophy.

In nineteenth-century England both the radical and the conservative ideas of a university emerged in the course of disputes about whether training an aristocracy in classics and elementary mathematics served any good purpose in an industrial and commercial society. With a few exceptions, the strength of educational radicalism lay outside Oxford and Cambridge. Necessarily, therefore, the radical idea first appeared as an ideal to be realized, and it came closer to being realized in the later provincial universities than it ever did in Oxford and Cambridge.

The strongholds of educational conservatism, on the other hand, were the older universities themselves, supported by the Church and by Tory interests generally, and in the case of conservatism theory came after practice. Indeed, the theory of a classical education owes its initial elaboration in modern times to the necessity of defending the existing system of Oxford and Cambridge against radical critics. It is true that the rationale was developed while the universities were revitalizing the

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system on their own account. It is also true that it had many points in common with the Renaissance ideal of humanist education. It would, however, be difficult to trace the survival of any philosophy of education through eighteenth-century Oxford and Cambridge. Though the system itself had originated earlier, this was the period when it had become fixed (not to say ossified), and this came about chiefly through the accidents of institutional history rather than in consequence of any theory.

One could, indeed, argue that much of the prestige—or at any rate the snob value—of classical studies as a general instrument of education in the modern English-speaking world derives from the fact that in the early nineteenth century Oxford tutors, who were determined to maintain their monopoly of university teaching, did not know anything else to teach. They believed in their wares and valued their positions, and they were forced in self-defense to elaborate a persuasive justification of the manner in which the English upper class was being educated. Publications of Cambridge tutors claimed for the study of mathematics the same pedagogical benefits which in Oxford were attributed to classics—a circumstance which supports the impression that the manner rather than the matter of the education was what ultimately gave rise to the theory developed to defend it.

To the radical contention that the excellence of an education is measured by its utility, conservatives tended to reply that, on the contrary, the value of an education is proportional to its practical uselessness. In Newman's view, a university should dispense liberal

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knowledge, and he distinguished between liberal and useful accomplishments by quoting Aristotle: “‘Those rather are useful, which bear *fruit*; those *liberal*, which *tend to enjoyment*. By fruitful, I mean, which yield revenue; by enjoyable, where *nothing accrues of consequence beyond the using.*’”⁵ Actually, however, neither the radical nor the conservative argument ever really met the other because the two sides never reached agreement on the purpose of higher education.

For the radical the essence of education was applicability; cultivation of the mind was a by-product. In conservative theory the essence of education was discipline of the personality both in moral and mental qualities, which were thought to be closely associated. The subjects of the curriculum should be laid out, not according to their importance in the humdrum business of getting a living, but according to their value as intellectual gymnastics. Once the mind was trained in processes of logical thought and its powers of reason were properly exercised, once the tastes and values were sufficiently elevated through familiarity with the highest achievements of the human mind and spirit—and experience had proved that the languages, the literature, the mathematics of classical antiquity (plus a little Newton at Cambridge) were the best instruments for these ends—then the student, even if he knew no useful facts, had nevertheless been trained to think, and to think like a gentleman instead of like a manufacturer or mechanic. He would, therefore, be supremely qualified to handle any problems life could set him, and to handle them with grace, poise, balance, and a cultivated judgment. There was no objection to educating only a social elite.

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Only an elite could (and many people felt should) be educated.

The religious basis of higher education was gone by 1900, as the more subtle class basis was not, but neither had been simply or wholly obstructive. Evangelicalism shared responsibility with the legacy of Newton for the fact that Cambridge stood less in need of reform than Oxford at the opening of the nineteenth century. And in the 1830's Anglican tractarianism shook Oxford out of its aristocratic lethargy and made it the home of vigorous and searching thought. Having done so, the movement performed the university a further, if somewhat negative, service by collapsing amid a revulsion of feeling which had the effect of freeing the majority of Oxford men from their obsession with theological hairsplitting and turning their newly awakened energies outward toward literature, philosophy, and secular learning.

The universities, moreover, were essential in fixing a pattern of service and behavior on the Victorian aristocracy. An influence like Jowett's over the later life of his students could scarcely have come out of any other educational environment than that of an Oxford or Cambridge college. The success of the English governing class may have to be explained on grounds of character rather than intellect, but it would not have distressed the university authorities to have their graduates evaluated in this fashion. In Pusey's view:

The object of Universities is, with and through the discipline of the intellect, as far as may be, to discipline and train the whole moral and intelligent being. The problem and special work of an University is, not how to advance science, not how to make discoveries, not to form new schools of mental

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philosophy, nor to invent new modes of analysis; not to produce works in Medicine, Jurisprudence or even Theology; but to form minds religiously, morally, intellectually, which shall discharge aright whatever duties God, in His Providence, shall appoint to them. Acute and subtle intellects, even though well-disciplined, are not needed for most offices in the body politic. Acute and subtle intellects, if undisciplined, are destructive both to themselves and to it, in proportion to their very powers. The type of the English intellectual character is sound, solid, steady, thoughtful, well-disciplined judgment. It would be a perversion of our institutions to turn the University into a forcing-house for intellect.⁶

Opinion on university issues was full of complexities. Before 1830, for example, the device of competitive examinations was developed first in Cambridge and then in Oxford as their major contribution to their own reform. It was the one feature of the universities which was warmly approved by utilitarians. So successful were formal examinations in stimulating hard work and so mechanically satisfactory did they seem that dons fell in love with the system and pointed to it as proof that higher education *was* a serious affair. Eventually the country at large became convinced of the virtue of competitive tests, not only as measures of achievement but even as instruments of schooling. When the state gradually took on responsibility for elementary, secondary, and technical education, it adopted the examination system as the basis of administering its grants, and—a more striking illustration—the methods by which Oxford and Cambridge separated the sheep from the goats were employed by the government in recruiting the civil service both at home and in India.

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But while Benthamites and their intellectual successors were enthusiastic about the apparatus, if not the content, of examinations in Oxford and Cambridge, other critics of the universities were hostile to the whole system. Scholars, scientists, and educational liberals like Matthew Arnold and Mark Pattison generally deplored what Americans would call the overemphasis on grades and felt that examinations encouraged the regrettable and philistine English tendency to value the outward badge of learning rather than learning itself, to cram rather than to contemplate, to study only what would pay on examinations and hence lead to prizes and fellowships rather than what was intrinsically true or useful. The professoriate usually agreed with liberals here. (Unlike the material dispensed by college tutors and by the many other fellows who added tidily to their incomes by private coaching, the subjects of professorial lectures were never covered on examinations.)

Although the examination system had been introduced into England by the authorities of Oxford and Cambridge, conservative educational influence was also responsible for much of the dissatisfaction with the University of London so long as that body remained simply an examining mill. Chartered in 1836 to grant degrees to qualified students from University and King's Colleges—and after 1850 from other accredited institutions—the University of London itself had no faculty and no teaching function. In 1858, its facilities were thrown open to all candidates, who, if they passed the questions set them, were awarded degrees regardless of where or how they had studied.

This arrangement was in part an attempt to satisfy

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the increasing demand for higher education without encroaching on the peculiar and jealously guarded privilege of Oxford and Cambridge. At best, however, the University of London was a workable stopgap. It was never regarded as an altogether happy solution to the problem because, although the restrictiveness of Oxford and Cambridge had been one of the elements which originally forced the adoption of a compromise, their example was also responsible for the fixed English belief that a university should both instruct and examine resident students. The mere possession of information should not in itself carry title to a degree unless accompanied by some assurance that the recipient had acquired with his knowledge the intangible but real advantages given only by life in an academic community.

Even the basic debate as to whether a university should foster professional skills or whether it should forge character on the anvil of the classics was never as clear cut as it seemed. Dons like Pusey and Freeman defended the traditional system on the ground that it trained a class of enlightened and aristocratic public servants, and this is surely one form of professional education. A little later, on the other hand, Huxley urged the study of science because it disciplines the intellect. By the latter part of the century the issue had pretty well subsided, though it was never exactly settled. No one ever replied to Mill's remark that in the ideal university there must surely be room for both literature and science, for both mental training and modern learning. In practice the older universities continued to emphasize the traditional subjects and by their side made room for

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the sciences and for other modern studies, while the new foundations which eventually developed into the provincial universities offered chiefly practical subjects at first and made subsidiary provision for arts.

Despite many concessions to the spirit and necessities of the times, however, the traditionalists cannot be said to have lost their battle. John Stuart Mill had no reason to feel kindly toward Oxford, but even Mill was strongly if unconsciously influenced by the Oxonian conception of the function of a university. He told the University of St. Andrews:

Men are men before they are lawyers, or physicians, or merchants, or manufacturers; and, if you make them capable and sensible men, they will make themselves capable and sensible lawyers or physicians. What professional men should carry away with them from an University, is not professional knowledge, but that which should direct the use of their professional knowledge, and bring the light of general culture to illuminate the technicalities of a special pursuit. Men may be competent lawyers without general education, but it depends on general education to make them philosophic lawyers—who demand, and are capable of apprehending, principles, instead of merely cramming their memory with details. And so of all other useful pursuits, mechanical included. Education makes a man a more intelligent shoemaker, if that be his occupation, but not by teaching him how to make shoes; it does so by the mental exercise it gives, and the habits it impresses.⁷

By the late 1860's three originally subsidiary issues had become important. The problems of what should be taught, and why, had become merged in the questions, first, of who should be taught; second, of how they

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should be taught; and third, of the responsibility of a university toward learning and research. These issues were closely related not so much by internal logic as by the circumstances of the discussion.

Like most English institutions, the older universities were modernized by changing their content and function as much as necessary while preserving so far as possible their form and spirit. And in England the extension of higher education, like the extension of the vote, was generally supported on grounds of national expediency and social necessity rather than of abstract right. That parallel is striking (even to the point that the claim of feminism to a right in the franchise and in the universities was an exception to the usual type of argument). And in both cases, the first steps—the Parliamentary Reform Bill of 1832 and the opening of closed scholarships to competition after 1850—had the incidental effect of disqualifying the lower classes in a few regions where the old anomalies had favored them.

No school of opinion regarded poverty as having in itself any claim on the universities. After 1870, it is true, a number of dons in Oxford and Cambridge undertook the leadership of the university extension movement, but this, though worthy and sincere, was adult education of the night-school type. It did not involve opening the universities themselves to the poorer elements of the population. Such an impossible project would have destroyed academic standards, and, even if it had been practicable, conservatives feared that it would succeed only in making people unwilling to do manual labor and in overturning the social structure. Higher education for the working class in places like Owens College got off

to a very slow start and encountered considerable hostility. "Anyone educated in Manchester," said the *Saturday Review* in 1877, "would certainly be dull and probably vicious."⁸ In 1850 the proposal to base scholarships in Oxford and Cambridge on need was thought illiberal. It would have put a premium on poverty and closed an avenue of profit to ability. "What the State and the Church require . . . is not poor men, but good and able men, whether poor or rich"—so thought the Oxford Commission of 1850.⁹

Although critics of Oxford and Cambridge made much of the point that the university endowments were a trust to be used for the benefit of the nation, most radicals had no notion of generally extending higher education beyond the middle classes. And after 1850 university conservatives also accepted and even embraced the inevitable. Freeman inquired:

Shall the University endeavour to influence the great middle class of England? Surely the University hardly fulfills its mission as a great national institution, a corporation charged with the guidance and nurture of the national intellect, unless it at least attempts to extend its benefits to these most important classes. Surely it is hardly true to itself if it does not endeavour to gain by all honourable means the vast accession of strength which would be conveyed by the adhesion of those orders of men who now possess the primary political influence in the country.¹⁰

Radicals regarded colleges as hotbeds of clericalism, privilege, and idleness. They attacked the collegiate organization of the universities and the tutorial method of instruction as vested interests, and the more extreme critics looked to the professorial university of the Ger-

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man or Scottish type as the progressive alternative. Professorial instruction was thought to be demanded by the nature of modern subjects, particularly the sciences, since these required a degree of specialization and a provision for laboratories possible only on a university level. Besides this, the expansion of higher education at new universities would necessarily involve teaching by means of lectures to large numbers of students.

Outside of radical and Scottish circles, however, the idea of professorial universities was never very well received. "For it is truly urged," thought Mark Pattison, "that the collegiate life and domestic discipline are what make Oxford what it is. What the B.A. at present carries away with him is made up of a small modicum of acquired learning, and a peculiar stamp which remains upon him through life, and which constitutes undoubtedly a relative social advantage, whatever its true worth may be."¹¹ Professors might be perfectly satisfactory instruments for presenting grubby subjects full of facts, but for making the whole man, for sharpening the understanding and elevating the mind, what was required was the intimacy of the tutorial relationship. As a type, moreover, professors were generally supposed to be both learned and Germanic and likely, therefore, to act as instruments of the state and to do research—neither of which was a function of the pre-eminently English tutor.

Illogically enough, democratization also involved the introduction of original research into the universities, though only in an incidental way. Most of the provincial universities started as technical and professional schools, emphasizing the teaching of science and applied science,

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and the professors were often research scientists. To Englishmen of the mid-century, however, professorial research was primarily a German phenomenon, and its most obvious products were unorthodox views about the Bible. For Pusey, at least, this was the conclusive consideration against the expansion of professorial teaching in England—it was sure to lead to science, research, rationalism, and infidelity.¹²

So far the English discussion of universities had treated them simply as places of undergraduate education. There were, of course, always a few productive scholars at Oxford and Cambridge, but facilities for science were almost nonexistent until the late 1860's, and the importance attached to research in other fields may be measured by the fact that until the 1850's no books might be taken out of the Bodleian Library, which, nevertheless, closed at three o'clock. The idea that a university is peculiarly a center of research and that a major function is postgraduate training was not widely established until the present century, and before 1870 or so the suggestion was usually advanced only to be refuted.

Newman defined a university as “a place of *teaching* universal *knowledge*. This implies that its object is . . . the diffusion and extension of knowledge rather than the advancement. If its object were scientific and philosophical discovery, I do not see why a University should have students. . . .”¹³ There are, said the *Times* in 1867, two opposing conceptions of the university: its function is either research or teaching. Most Englishmen take the second view and expect their children to be educated. If research and the cultivation of learning interfere

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with teaching, parents expect these pursuits to be restricted, or else they will cease to send their sons to the universities.¹⁴

Until late in the century, liberal opinion on research was indifferent rather than actively hostile. Mark Pattison, the most radical of the internal critics of Oxford and Cambridge, agreed with Newman that a university existed for the sake of the students, not the subjects. He did urge that the endowments should maintain a professional body of men of science and learning. It is not, however, to forward the interests of science and learning that they are associated, but in order to increase the efficacy of the institution as a seat of education. Pattison's ideal faculties would simply master and hand on existing knowledge; they would not be expected to advance it, and he also agreed with Newman and the *Times* that the characteristics which make a man a good investigator are almost certain to disqualify him as a teacher.¹⁵

A definite shift in opinion on research occurred around 1870. In 1873 the Devonshire Commission described research as a primary duty of the university,¹⁶ and it is significant that the first official body to assert this view was a commission on scientific instruction and the advancement of science.

The scattered supporters of the German conception of a university did not attempt to appeal to some ideal of advancing the frontiers of knowledge—such an approach would have awakened no response in English opinion until considerably later. Instead, it was by a demonstration of the obvious, practical, concrete utility of science that responsibility for facilitating original research was first fixed on the English universities. Anti-

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German prejudice had stiffened the opposition to this development. This was also, however, the period when the English began to feel the first twinges of uneasiness about their industrial position and their commercial and military security. The few intellectuals like Huxley, Matthew Arnold, and later the Webbs, who admired Prussian efficiency and German scholarship and who wanted to emulate both in the universities, were decisively reinforced by the general apprehensiveness about German scientific progress and German industrial competition.

Once the breach was made, a strong tradition of original scholarship for its own sake did develop within the walls of English universities. The contributions of Cambridge to modern physics go back to the 1870's. Oxford became a center of philosophy in the same period, and before the turn of the century the professional spirit had permeated the history schools at both Oxford and Cambridge. Other examples might be mentioned—following the Commission of 1877–1882, the new emphasis on specialized scholarship was apparent in all fields in the enlargement of the professorial faculty and the curriculum. Nevertheless, acceptance of responsibility for research was always more qualified than in Germany, and in Oxford and Cambridge the effects were more or less grafted onto the parent stem.

After 1880 the influence of the new ideas was more immediately obvious in the agitation in favor of transforming the University of London into a teaching university. The movement was exceedingly complicated, and its objectives were far from being realized by 1900, but a fairly definite ideal of what the university should be had emerged by then. The potentially enormous

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number of qualified students in London were to be provided with general, professional, and technical education on the undergraduate level. In addition, university examinations leading to degrees were still to be open to students throughout the empire.

No attempt was to be made to imitate the humane, domestic atmosphere of Oxford and Cambridge. Instead, the university intended to exploit and co-ordinate the unique opportunities for research and study in the metropolis. Faculties were to be headed by specialists actively engaged in advancing their subjects, who would provide formal graduate instruction and seek to attract the ablest students both from Britain itself and from overseas. Eventually London ought to rival Paris and Berlin as the seat of a world university, and in addition to being desirable in itself, the brains and talent brought in would be of great concrete advantage to the industrial, commercial, and social progress of the empire. In a word, the requirements of democratization, of imperialism, of technology, of professional training, and of providing for both teaching and research in the sciences, social sciences, and arts, were all reflected in the project for incorporating a federated university in London.

Like London, the other provincial universities were barely getting under way by 1900, but if their history falls in the twentieth century, their origins belong to the nineteenth. Except for Durham, all of the present civic universities started as university colleges which qualified students for degrees conferred by the external examining authorities of the old University of London or the Victoria University. The oldest of them, Owens Col-

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lege in Manchester, had been founded in 1851 by the will of a Nonconformist businessman, but the enrollment was still only about one hundred in 1870, when it began to grow rapidly. The other university colleges were all opened in the last thirty years of the century.

In general they were either outgrowths of schools of applied science and engineering and owed their origin to the increasing demand for technical education, or else they developed around courses of extension lectures sponsored by Oxford and Cambridge. The Yorkshire Science College in Leeds and Mason College in Birmingham were examples of the former type, the university colleges in Reading and Nottingham of the latter. A few, though not all, of these foundations were at first exclusively scientific and technical. Sir Josiah Mason, a self-made industrialist, had refused to permit his money to support anything except scientific, technical, and commercial instruction. In Manchester, on the other hand, Owens College had provided courses in the liberal arts from the beginning, an example which was followed in most other cities.

Despite incidental differences, however, all the provincial university colleges conformed to a general type and met a similar need. Whether founded by an individual philanthropist or by a civic movement, they were frankly the creations of an industrial and commercial society. Even where work in arts was available, the primary emphasis was vocational and professional training because this was what the majority of their students wanted. After Birmingham became a university, one of its innovations was a faculty of commerce, and it even offered courses in brewing. The teaching at all these in-

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stitutions was professorial. A number of the professors happened to be research scientists, but the support of research could not be a primary objective of the universities themselves until the present century, when their financial resources, though still rather limited, had grown larger.

And in another way the objectives of the lesser civic universities were at first somewhat more restricted than those of London. All of them were regional institutions primarily concerned with providing educational opportunities for local students, both men and women, most of whom would live at home. In the case of London, this was only one of many functions of a university which was also intended to be national, imperial, and even cosmopolitan in its scope. But when the governing body of Mason College petitioned the crown to charter a university in Birmingham, they did so on the grounds that the College must have control of its own degrees if it was to "model its teaching and educational activity on such lines as will be specially advantageous and useful" to the population, manufactures, and industries of the Midland districts.¹⁷

At the end of the century, the reconstitution of London and the foundation of provincial universities had not impaired the prestige of Oxford and Cambridge, which, despite enormous changes in the past hundred years, remained in many respects unique. The idea or fact that they had a particular responsibility to the governing class died hard, if indeed it did die. In 1909, Lord Curzon as Chancellor of Oxford warned that a democratic zeal for academic excellence must not squeeze out the pass man. If Oxford, he thought,

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is to continue to deserve the name of a University, it has few more important duties to perform than to give a good general education to the man of birth and means. To convert him into a useful public servant is as honourable a task as it is to convert the artisan into a useful citizen, or the solicitor's son into a good solicitor; and many of the men who in later life have done the greatest justice to Oxford have been those who never took more than a Pass degree.¹⁸

Collegiate residence retained its importance as an integral part of education, and the influence of the system is apparent in the attempt of the new universities to house students in hostels providing some sort of social life. "English opinion," said one commentator, "shrinks from the homeless condition of the undergraduates in Edinburgh or Berlin."¹⁹ Undergraduate devotion to sport contributed to the esteem in which the older universities were held—as far back as the 1840's a boat race had been the one indication which convinced Alton Locke, Kingsley's Chartist tailor, that, despite everything, there was sound British stuff at Cambridge.

Research degrees had been instituted shortly before 1900, chiefly to attract foreign students, but though there were now many productive scholars at both universities, there was as yet little provision for formal postgraduate instruction. Undergraduates were still the main concern, and in the eyes of apologists—and of critics, too—Oxford and Cambridge were more than universities. Oxford in particular seems to have been in addition almost a way of life if not a state of grace, and an education there was not only a training of the mind, but a social, a moral, a British, even a spiritual experience.

Although this attitude aroused some impatience out-

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side the fold, there were very few intramural reformers who altogether rose above it; and, despite the shake-ups imposed by Royal Commissions and Parliament, the special character of the older universities was treated tenderly. Not for Oxford or Cambridge the earnest, the utilitarian, the somewhat dowdy and out-at-elbows intellectuality of Bloomsbury scholarship, and not for them the professional, trade-school atmosphere, the on-wards-and-upwards-with-a-degree mentality of the provincial university. For Oxonians the objective remained the development of the whole man, and even critics would agree that Oxford trained, at least, the whole Oxford man.

NOTES

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2. *House of Commons Sessional Papers* (1922), X [Cmd. 1588], p. 11.
3. Mark Pattison, *Suggestions on Academical Organisation* (Edinburgh, 1868), p. 55.
4. Royal Commission on Cambridge, *Report* (1852), p. 202.
5. J. H. Newman, *The Idea of a University* (London, 1891), p. 109.
6. E. B. Pusey, *Collegiate and Professorial Teaching and Discipline* (Oxford, 1854), pp. 215-216.
7. J. S. Mill, *Inaugural Address Delivered to the University of St. Andrews* (London, 1867), pp. 6-7.
8. Quoted in Edward Fiddes, *Chapters in the History of Owens College and of Manchester University, 1851-1914* (Manchester, 1937), p. 73.
9. Royal Commission on Oxford, *Report* (1852), p. 174.
10. Quoted in J. W. Adamson, *English Education, 1789-1901* (Cambridge, 1930), p. 192.
11. Pattison, *Suggestions*, pp. 76-77.
12. H. P. Liddon, *Life of E. B. Pusey*, 4 vols. (London, 1898), III, 387-389.
13. Newman, *Idea*, p. ix.

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14. *Times* (London), March 8, 1867, p. 7, cols. 4-5.
15. Pattison, *Suggestions*, pp. 171-173.
16. *Third Report, House of Commons Sessional Papers* (1873), XXVIII [C. 868], pp. xxix-xxxi, lvi-lx.
17. *House of Commons Sessional Papers* (1900), LXVI, Accounts and Papers, No. 22, p. 1.
18. Lord Curzon, *Principles and Methods of University Reform* (Oxford, 1909), p. 117.
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American Universities
in the Nineteenth Century:
The Formative Period



WHEN asked about American universities in the nineteenth century, the first instinct is to reply: Were there any? But a little investigation soon sets you to wondering: Was there anything else? And this question in due course gives way to the still more painful inquiry: Were American universities ever what they said they were?

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No question but what there were a lot of such institutions. Donald G. Tewksbury has estimated that 516 colleges and universities were founded in sixteen states before the Civil War. Most of these promptly died. But in the United States as a whole an astonishing number of colleges and universities survived into the twentieth century. And when Columbia installed General Eisenhower as President, the representatives of no fewer than 135 colleges, 16 technological or military or special institutes, and 101 universities (including 36 state universities)—all of them founded before 1901 and no two of them quite alike—welcomed the General into what can only be described as mixed company.¹

The word “mixed” must be emphasized, particularly for the nineteenth century. Our dictionaries defined

* Larned Professor of History, Yale University.

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University in rather general and shifting terms.* The performance itself was not decisive. The institution seemed to mean one thing in one place, quite another thing in another. Out West they liked the size of the sound. Here and there people acted as if a university could be set up overnight. At intervals there were spasms of almost indecent haste to seize upon the name. As one of the great university builders, Daniel Coit Gilman, remembered,

In the middle of the century the word "university" was in the air. It was cautiously used in Cambridge and New Haven, where a number of professional schools were living vigorous lives near the parental domicile, then called "the college proper," as if the junior departments were colleges improper. To speak of "our university" savoured of pretence in these old colleges. A story was told at Yale that a dignitary from a

* Dr. Samuel Johnson's definition (the definition first adopted in this country) was: "A school, where all the arts and faculties are taught and studied."

In 1828 Noah Webster then redefined the university as: "An assemblage of colleges established in any place, with professors for instructing students in the sciences and other branches of learning, and where degrees are conferred. A *University* is properly a universal school, in which are taught all branches of learning, or the four faculties of theology, medicine, law and the sciences and arts." As revisers and editors of this dictionary, Chauncey A. Goodrich and Noah Porter in 1864 gave the second of these definitions, i.e., the Continental concept of a university, the preferred position.

In 1891 the *Century Dictionary*, edited by still another New Haven scholar, William D. Whitney, emphasized research: "An association of men for the purposes of study, which confers degrees which are acknowledged as valid throughout Christendom, is endowed, and is privileged by the state in order that the theoretical problems which present themselves in the development of civilization may be resolved."

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distant State introduced himself as chancellor of the university. "How large a faculty have you?" asked Dominie Day. "Not any," was the answer. "Have you any library or buildings?" "Not yet," replied the visitor. "Any endowment?" "None," came the monotonous and saddening negative. "What have you?" persisted the Yale President. The visitor brightened as he said, "We have a very good charter." ²

We may deduce that by the 1850's there were at least some colleges which were beginning to do higher (or broader) kinds of work, and not a few schools of the lower learning which laid claim to the higher name. In the nineteenth century, the poet says, "America was promises"—but perhaps a little uneven and halting in performance.

If challenged to name the date when universities appeared in the United States, one must probably answer: the decade after the Civil War. But this itself was merely one stage—I should call it the semifinal stage—in a long series of efforts and advances. Thus, the first university-building movement came in the wake of the Revolution, when Pennsylvania (1779) and Harvard (1780) were officially designated universities, charters were issued for the universities of Georgia (1785) and North Carolina (1789), and the skeleton University of the State of New York was created, with Columbia attached (1784). But to confer legal titles did not create the substance.

In the 1820's came on a second wave, with the pioneering efforts of Nott at Union, Marsh at Vermont, Abbott at Amherst, Ticknor at Harvard, and above all Jefferson's University of Virginia "based on the illimitable freedom of the human mind." Again in the mid-forties and early

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fifties, the founding of the Lawrence and Sheffield Scientific Schools, the work of Wayland at Brown and of Tappan at Michigan, marked an impressive forward movement.

Then in the years 1865–1876 began the great university-building work of White at Cornell, Eliot at Harvard, Barnard at Columbia, Angell at Michigan, and Gilman at Johns Hopkins. By the centennial year still other institutions were following. In the 1880's Minnesota and Wisconsin began to develop. In 1889 Clark University was started, in 1890 Chicago, in 1891 Stanford. And the last quarter of the century has accordingly been recognized as the period of university adolescence in this country. By 1888 the situation had already progressed so far that James Bryce thought he could identify from 8 to 12 true universities, some 30 to 40 colleges (or state universities at the undergraduate level), and 300 institutions which, whatever their titles, were hardly more than secondary schools.³

By 1900 the number of unmistakable universities had grown again, and at least eight had enrollments of more than 2,500. But even these were for the most part one-sided and unbalanced institutions, differing from each other and from what they would become. Of the lot, Harvard was the most substantially developed. But Harvard itself had peculiarities. In short, 120 years of effort had as yet produced no typical university, no single American type. And our first generalization must therefore be that the nineteenth century was the period of trial and failure, of discovering the elements that were essential to universities, and then assembling them in various patterns or distinctive combinations. By contrast

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with England and the Continent, the problem was one of creation, not capture or redirection.

If we next ask where the American people got the idea that they needed universities at all, the rough answer is: the needs were domestic, but the ideas or devices were imported.

About the needs, books could be written. But perhaps we can sum them up in these words: Nationalism and Democracy—the Scientific and Industrial Revolutions—the physical expansion of the people westward, and their intellectual expansion beyond the confines of religious authority. Thus, with the Declaration of Independence, Americans needed to create their own centers of the highest learning. With the development of manhood suffrage, more people needed to be educated than had ever been so privileged before. With the Industrial Revolution and the expansion westward came the desire to apply the new sciences to the exploitation of the continent. With the discovery of new learning came an increasing impatience with the old.

Finally, with the splintering of American Protestantism into sects, and with each sect seeking to found or control its own colleges—but with the popular attitudes becoming rather secular and materialistic—more and more people became persuaded that the colleges of the United States were not going to be the final answer to the problem of higher education in this country. These observations are overgeneralized. But the mere restatement will be useful if it reminds us that the desire for new institutions of learning arose not out of a single need but out of a wide variety of ambitions and dissatisfactions.

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As for ideas and devices for universities, these came in the main from abroad.* Three waves of influence can be distinguished. Originally the Reformation had planted in the colonies one small unit of the English university—the Protestant college—together with the university privilege of granting degrees. Then, in the second half of the eighteenth century, the Enlightenment, transmitted by agencies that were predominantly Scotch and French, brought to the new nation the following concepts: the idea of the learned academy or philosophical society for the promotion of discovery and scholarship—the idea of a national or state university to serve the needs of the republic and crown the system of public instruction—an antitheological bias, with an eighteenth-century interest in the natural and social sciences—an antiaristocratic prejudice, with a corresponding enthusiasm for applied and material studies.

Finally, in the years from 1815 to 1876, came the period of great German influence—and the importation (or reinforcement) of still another series of important ideas. On the one hand, the Swiss-German manual train-

* To say that we borrowed the basic patterns from Europe is not to deny variations or to insist that ideas can be invented only once. For the needs were coming to be so obvious that sooner or later diversification, specialization, and the multicollege solution must certainly have been attempted. As it was, there can be detected considerable reinvention, or adaptation of notions floating vaguely in the air, to say nothing of substantial changes in proportion. Nevertheless, our very atmosphere had been conditioned by English experience and continued to be influenced by Continental inventions. And among all the great educational pioneers in this country, from Franklin and Jefferson to Eliot and Gilman, one is troubled to name a single leader who did not take conscious advantage of the already existing possibilities, pre-discovered across the water.

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ing idea, for the education of farmers and artisans, reinforced utilitarian impulses and encouraged the heirs of Ben Franklin to experiment with polytechnic schools. On the other hand, the Continental assumption that universities were not residential or undergraduate colleges but clusters of professional schools in law, medicine, theology, and the higher arts and sciences reminded forward-looking Americans to try to add the professional to the collegiate function.* Most important of all, in the long run, was to be the German example of the free university: an institution where students could study when and what they pleased, and where the professors seemed to be free to teach and to investigate, to lecture, conduct seminars, publish, and compete with each other in the search after new knowledge.⁴

All this is almost too well authenticated to need repetition. But once again a purpose will have been served if we take note that these European ideas and definitions came to us not only at various times but loaded with the most positive and conflicting assumptions as to what constituted the good society and life. All of which brings us to the main problem and argument of this analysis. Given such obvious needs, and given so many usable suggestions, why was it so difficult to create universities in the United States? I think it important to ask ourselves: Why were we so slow?

* In part the colleges accomplished this by founding their own professional schools, in part by making alliances with medical societies and theological seminaries and lawyers already giving apprentice training in their offices. So began a process of agglomeration which first counteracted the diffraction of energies, then in the twentieth century pioneered for megalopolis its megal-university.

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Many explanations have been given, but not all will stand scrutiny. Were models lacking? Hardly. Were background and cultivation missing? On the contrary, ours was an old people and a cherished inheritance: before Andrew Jackson went out of office Harvard was 200 years old. No doubt our democratic standards were peculiarly mixed. (Jackson could deprofessionalize the public service—and accept a degree from Harvard.) But did we lack the time or the money? With America so prosperous, and with more than 500 institutions founded before the Civil War, we should take no stock in that answer. Unquestionably habit and institutional inertia had a good deal to do with the lag in the older foundations, the more so as our conservative colleges were in the main connected with the still more conservative churches. But ought we not to look also for explanations less universal in their application, and more revealingly American? With some hesitation, I suggest the following.

It would seem that we were slow in the first instance because of excessive competition and decentralization. Again, we were slow because the promoters of higher learning could not agree on the purposes or functions of American universities. In turn, educators were slow to discover how many ingredients were required, and the American public was slower still to furnish even the bare necessities. Finally, and connected with the problems of purpose and support, was a peculiarly difficult problem: the problem of the relations between the old-style college and the new-style university. I should like to say a word or two about each of these explanations.

COMPETITION AND DECENTRALIZATION

It has already been stated that early Harvard represented one small unit of the English university—the Protestant college—together with the university privilege of granting degrees. Since the English universities were themselves but clusters of colleges without the superior or professional schools of their Continental prototypes, this meant that the colonists began with a mere fragment, a twice-truncated version, of the medieval university.

Accidents of geography, religion, and government then conspired to prevent a rebuilding. That is, when more colleges were attempted, the distances, the separatism, and the multicolony arrangements of government were all such that—instead of being clustered around Cambridge—the new colleges came to be planted up and down the coast, from Williamsburg to New Haven. Anglicans, Baptists, and Dutch Reformed established their own institutions. Distance and religious conservatism have been given as reasons for Yale's founding. Distance and new-light Presbyterianism then led Yale men to establish the College of New Jersey. With Dartmouth came a second Congregational college, but in a different jurisdiction.

Nor did the decentralization of sovereignty end with the Revolution. With independence the degree-granting powers were assumed by the several states. With westward expansion the number of these states multiplied. With the import of more denominations from Europe the number of applicants for degree-granting privileges

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increased. With the discovery that colleges attracted settlement came efforts by real estate promoters and politicians to use higher education to sell land or to fix the county seat. So colleges became articles of commerce and local politics as well as of faith. And with the Dartmouth College case (1819) it became almost impossible for a state to withdraw charters too liberally bestowed, or to force consolidation and federation.

Hence everywhere there was a tendency for the colleges to multiply up to the extreme limit of the supporting powers of the social environment—and past the point of quality support. In the newer regions this generated a fierce struggle for subsistence. And to the older establishments it meant loss of capital and clientele. Once the College of New Jersey had sent its sons south and west, the younger generation of Presbyterians no longer needed to resort to Princeton for an education. So also with the Congregationalists, whose educational efforts went more to the providing of new colleges than to the elaboration of the old. Before the Civil War Yale helped to found at least sixteen enduring colleges—yet none of them in New Haven. In a nutshell Yale became a Mother of Colleges a century before it could accumulate the substance of a university.

If concentration of effort proved impossible for the church colleges and the competing communities, the establishment of a single national university turned out to be even less possible. Not that the idea was overlooked, or failed for want of expositors.⁵ Dr. Benjamin Rush and George Washington, James Madison and J. Q. Adams, Samuel Blodgett and the early nationalist Joel Barlow, all saw advantages in an institution which

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would promote higher studies and do away with provincialism or sectional prejudices. Almost yearly from the founding of the Republic until 1829, and again with intermittent insistence after 1869, proposals were submitted to Congress for a national university.

But before the Civil War ours was a Union of sovereign states. The general public was uninterested in advanced learning. And those elements which could see the advantages of specialized training found their energies locally or privately engaged. Yet before the nineteenth century was well advanced, Yale and Princeton were already broadly national rather than sectional in their constituency and attachments. Then in 1836 the Smithsonian bequest was accepted. In 1862 the Morrill Act made possible the land-grant colleges; and the next year the National Academy of Sciences was chartered in Washington. In the seventies a cluster of private universities developed graduate training and disinterested research. And in due course the Department of Agriculture, the Bureau of Standards, and other United States agencies set up their own specialist services.

So, as the presidents of Harvard, Columbia, and Yale more than once pointed out, the establishment of a national postgraduate institution would have merely duplicated the work of other government bureaus, competed with the established universities, and forced on the intellectual development of the nation a dangerous concentration and control.*

* In 1873 it was Eliot who exposed the fallacies of the proposal in a slashing attack: "There is something childish in this uneasy hankering for a big university in America."

In 1900 President Hadley wrote to John W. Hoyt, the perennial

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To summarize: the English collegiate establishment, as transplanted to this country, proved insufficient to nourish a colonial university. In the years 1775–1865 free enterprise, local pride, states' rights, and the dissenting tradition made next to impossible the accumulation of enough men and resources in a single institution. Finally the same decentralizing forces, plus the rise of special institutes and private universities, first made politically impossible, then socially unwise, the establishment of a single, all-embracing, national university.

HIGHEST STUDIES *vs.* UNIVERSAL STUDIES

The second great cause of delay in the establishment of American universities lay in an uncertainty of purpose. We have already noted that the definitions of *university* varied with men's hopes and designs. Not every champion of the idea entertained the same dissatisfactions, or responded to the impact of the same notions from Europe.

Many wanted a higher learning than the colleges were able to supply. Of these, some urged the attachment of professional schools, raised to the graduate level. Other scholars wanted to introduce into this country the Ger-

lobbyist for a national university, that, if such an establishment meant better care of the collections in Washington and better instruction to students using them, he was sympathetic. But if it meant an institution "to represent the sum of human knowledge," the examples of France and China made him fearful: "The organization of a body which claims a dominant position in the intellectual world, based on any act of incorporation, contains more evil than good. . . . It seems to me to substitute the principle of intellectual authority for that of intellectual liberty, and to do it in a form so plausible as to commit people in the wrong direction before they really know where they are going." ⁶

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man ideals of free teaching and free study, of lectures rather than recitations, of specialized investigation and research. Still other academic critics doubted the value of the classics or wanted to substitute the modern languages or the natural sciences (later also the social sciences).

The colleges had their social and economic critics, too. There were those who wanted the studies to be more professional or technical or vocationally useful. There were those in revolt against sectarianism, or the domination of the clergy, or any private management. There were those who regarded the traditional liberal arts as undemocratic, as class education.

Again there were theorists who rejected the old "faculty psychology" (i.e., that all men had innate faculties to be disciplined and trained) in favor of the idea that, if students could be interested rather than compelled, they would study to greater effect. Such educators also tended to believe that students had individual natures and differing interests and hence should be allowed to choose between studies.

It followed that the definitions of the desirable university ranged all the way from the simple to the extremely complex, and from the scholarly to the utilitarian. McCosh at Princeton thought it was enough to have a *studium generale* (or perhaps a cluster of colleges) with a few superior students and studies. Gilman at Johns Hopkins tolerated a college but put his whole emphasis on graduate studies and research. G. Stanley Hall at Clark tried to do without a college entirely. And Jordan, in certain moods at Stanford, thought a college antipathetic to the whole spirit of a university.

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On the practical side, Wayland of Brown insisted that "civilization is advancing, and it can only advance in the line of the useful arts." And Ezra Cornell tried to found "an institution in which any person can find instruction in any study." Moving from one camp toward the other, F. A. P. Barnard at Columbia spoke of the university as bridging the wide gap between the ideal world of the college and the world of business. Tappan at Michigan thought of the university as a school where a man might either pursue his subject for a whole lifetime, or give attention to particular studies for a limited time. And at Harvard Eliot now stressed research, or providing "a large number of specialists with a livelihood"—now urged that "a true university . . . stands for intellectual and spiritual forces against materialism." Yet earlier he had argued that "no subject of human inquiry" could be out of place, provided only that it was taught on the highest plane.⁷

In short, the university builders themselves were not agreed as to whether the universities should teach or investigate or do both; whether they should be storehouses or powerhouses or public pumping stations; whether they should be privately or ecclesiastically or governmentally controlled; whether they should educate an intellectual aristocracy for the guidance of a political democracy, or whether their first duty was to serve everyone who could make any use of them at all. Sometimes the presidents seemed to change their tunes and advocate incompatible ideals. So the more one studies their efforts, the more one grows confused. Yet in all this confusion, two schools of thought do seem to stand out. At least one seems to detect a sort of fundamental divi-

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sion between those who emphasized the studies that were higher and postgraduate and theoretical, and those who were interested primarily in undergraduate studies that were wider and more immediately vocational. Perhaps we may identify these as the schools respectively of the vertical and the horizontal university.

INGREDIENTS

In all this debate, meanwhile, what had become increasingly obvious was a third disquieting fact. It was impossible to create a university of any type without the widest variety of resources and ingredients.

For one thing, the personnel was wanting. Advanced or scientific instruction could not be given unless there were students capable of receiving it. But where were the necessary schools? Even New England did not achieve an adequate system of college preparatory schools until the 1870's or 1880's. And as for the public high school system of the Middle West, that would not be ready until the twentieth century. In the West (just as we laid out roads before the settlers came) we actually built our colleges before our school systems. So not a few state universities had to offer elementary instruction as well, and early found themselves teaching more boys in their preparatory departments than in all their other courses put together.

Again, trained lecturers and investigators were needed. But where were such men to be found? Society did not believe in the expert; few Americans wanted to be professors; and those who did had to take training abroad.

Witness the difficulty of establishing specialized pro-

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fessorships and graduate instruction. In 1777, when the learned Dr. Ezra Stiles proposed a "Plan of a University" which would add the four advanced schools of law, medicine, divinity, and the arts and sciences, all he asked for was the addition of four professorships. But he failed to get a single one.⁸ Forty years later when the University of Virginia was organized, it was planned as a graduate institution. But Jefferson had to import almost all his professors, and even so the University had to operate at the undergraduate level. Another twenty years later, when Yale again moved to set up advanced and scientific studies, the response of the forties and fifties was so slight that it was not until 1861 that the first Ph.D.'s in America could be awarded, and not until the late 1880's that graduate instruction became important in New Haven.*

Meanwhile, Harvard tried "university lectures" and established its own graduate department, yet with doubtful success. All too obviously the public was not recognizing its opportunities. As Mr. Richard J. Storr observes, there was a "vast difference between *need* as felt by a few academic leaders and *demand* as evidenced by actual appearance of students. It was one thing for a few far-sighted men to sense a need in this country for highly trained men; it was another thing for immature

* Among others, Ticknor in the 1820's, Tappan at Michigan and Columbia and Western Reserve in the 1850's, had experiences equally discouraging. It was not until 1870-1874 at Harvard and 1872-1874 at Yale that the old practice of awarding the M.A. as a matter of course (i.e., for five dollars and keeping out of jail for three years) was abolished in favor of the earned M.A. "We have not fully learned the difference between a professor and a pedagogue," said Patton at Princeton in 1888.⁹

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B.A.'s to give up the opportunity for quick fortunes in order to become specially trained for anything." ¹⁰

In 1876 D. C. Gilman boldly nailed the flag of research to the mast by organizing Johns Hopkins as (primarily) a graduate university. And this time the idea did succeed. But the idea succeeded, one cannot help noticing, in part because of the eminence of the individuals Gilman imported to Baltimore, in part because of the spectacular salaries he was able to pay, in part because of the visiting lectureships he set up, in part because of the royal fellowships he was able to offer our brightest young men. In a word Gilman closed the gap between need and demand for advanced studies by first "hiring" his students.*

At the same time Gilman emphasized the spirit of research, started scientific clubs, and encouraged scholarly publication, especially through the establishment of monographic series and of scientific journals more specialized than the *American Journal of Science* which Silliman had established at Yale as far back as 1818. In the twentieth century, with Columbia and with Harper at Chicago emphasizing the same objectives, this idea of scholarly publication would lead to the recognition of university presses as one of the essential adjuncts of a progressive university.

Meanwhile, the need had been recognized for labora-

* This idea was not new. Andrew D. White had been putting particular emphasis on the need for more postgraduate fellowships. And the offering of subsidies to resident bachelors can be traced back to the 1640's (?) at Harvard and to the Berkeleian "Scholars of the House" at Yale (1732-1733). The trouble was that no institutions had been wealthy enough to afford fellowships to cover beyond the barest church-mouse necessities.

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tories and observatories and apparatus, for specimens and museums of natural history, for galleries of art and collections of antiquities. So also was the necessity for libraries that would be vast magazines and workshops of learning rather than gentlemen's collections of the classic and sacred and polite authors. Before a college could become a university, great additions to its equipment, and great changes in its point of view, had first to be achieved.

It is true that many of these forward-looking ideas, like the first "cabinets" of scientific instruments and materials, can be found in embryo well back in the eighteenth century. But it seems to have taken from fifty to seventy-five years for the first real experiments to be made, and another half-century or so before these early failures could be redeemed by establishments that endured. Witness the idea of vocational and technological training, first unsuccessfully advanced by Benjamin Franklin in Philadelphia and at King's College (Columbia), first precariously established in separate institutions like West Point and Rensselaer, then tentatively attached to the older colleges through the Lawrence and Sheffield Scientific Schools, but not raised to a status of honor and equality until the passage of the Morrill Act (1862), the founding of Massachusetts Institute of Technology (1861) and Cornell (1865-1868), and the development of some of the western state universities.

So also with the elective idea, which was implicit in eighteenth-century thinking, and which had to go through a long period of trial and partial failure and fresh impulses from Europe (William and Mary, 1779; Ticknor at Harvard; Nott at Union; Wayland at Brown;

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the Sheffield Scientific School; etc.), before it found its great champion in Eliot and in the last years of the nineteenth century came close to sweeping the academic boards.

Yet all such delays were political and financial quite as much as intellectual. Sooner or later the hopeful builders of universities found out that the best plan would come to little unless the *government* of the college was broadened, and its *funds* enormously increased.

The history of university government is too complex to handle fully in this paper. Suffice it simply to locate the evolution within a triangle of possibilities. Experimentally, three forms of government were tried: by the state, by the church, and by volunteer lay interests. Originally our colonial foundations were intermediate institutions, getting their charters with some inspection and financial support from the colonial governments, being mastered by and catering to the ministry, yet being patronized also by the lay public and endowed by private philanthropy.

Then came the disestablishment of the churches in the Revolution, and a separation between church and state that was not merely constitutional and financial but emotional and moral as well. In the development of the Ohio and Mississippi Valleys, as a consequence, efforts for higher education tended toward two distinct and somewhat antagonistic extremes: the state university or the denominational college. In the Northeast the vestiges of a shared interest and responsibility lingered on for almost a century. But characteristically the state grants dwindled and petered out; then the state legislators lost their interest in inspection. In turn the founding

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churches proved no longer strong enough to carry forward unaided. Or, from another point of view, domination by ministers of the gospel came likewise to seem unsatisfactory, in part because their views were thought to be too narrow, in part because they could no longer raise the support and funds. "A university cannot be built upon a sect," proclaimed Charles W. Eliot.¹¹

Still less, of course, could it exist on tuitions alone. Hence increasing resort to the third alternative: appeal to the lay public and in particular to its own sons. So the nineteenth century saw Harvard leaving its Unitarian phase behind and becoming a university, largely secular in its purposes and wholly private in its control. In the same way missionary Yale first became modestly interdenominational, then almost completely undenominational, self-governing, and alumni-supported.* Prince-

* Harvard shed the last vestiges of state and religious inspection in 1851 and 1865. But the step-by-step disentanglement of Yale is more illuminating to follow:

1792 Six senior senators added to Yale Corporation in return for state funds for dormitories and professorships.

1818 New Connecticut state constitution.

1823 Subscription to the Saybrook Platform no longer required.

1827-1828 Senator-Trustee inquires about the classics.

Publication of the 1828 Report.

First efforts to organize the alumni and appeal for funds.

1831 Last gift from the Connecticut Legislature.

Raising of the *Centum Millia* Fund.

1834 College officers no longer exempt from taxation.

1852-1853 Alumni Hall built.

1870-1871 Young Yale movement among the alumni.

1872 Substitution of elected alumni for the six senior senators on the Corporation.

1890 Start of the Alumni University Fund.

1899 A. T. Hadley, first lay president.

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ton, Dartmouth, and Amherst followed similar courses. Cornell, like Pennsylvania, became a joint state-private foundation; but by shrewd investment Columbia managed to steer clear of civic as well as religious domination. So in the East there was a trend toward the third alternative, and by slow steps there emerged a group of privately supported and self-governing institutions.

What all this suggests, and what one feels compelled to stress as emphatically as the basic idealism of the university movement will allow, is the critical role played by money—or rather the lack of it. For the plain fact is that it was absence of the cash ingredient, the lack of financial support from the American public, which did more than all else to delay the American university. In the celebrated Yale report of 1828, but in a passage not often cited, it is pointed out that the founding of the only American university (I take it the reference is to Virginia) had cost \$300,000, which was more than Yale had received from all sources, public and private, since its beginnings.

If I may continue this story, Yale College then went to its lay alumni, raised the *Centum Millia* Fund, and on this basis maintained a flourishing college, a respectable local medical institution, a strong-minded theological department, a semiprivate law school—the last two giving no degrees—an art gallery, and a small underground laboratory for chemical demonstrations. But when in the 1840's the Silliman group wanted to add scientific and

1902–1905 Successor Trustees begin to elect New Yorkers, Presbyterians, lawyers, and bankers in place of Connecticut Congregational ministers.

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graduate study, there was no money left to spare. So they had to try to do without. Was this exceptional? Not at all. Let it not be forgotten that Cornell, Johns Hopkins, Leland Stanford, and Rockefeller's Chicago all would have been impossible but for millionaires. The success of Clark University was jeopardized by a benefactor who failed to follow through. And in similar fashion, the state universities owed more than a little to the Morrill Act and later federal grants.

Harvard, to be sure, did expand into a university without help from the state or the intervention of a single Maecenas. But Boston was a nursery of philanthropists. And Harvard also profited earlier and more fully than any of its rivals from the rising tide of industrial prosperity. It is a point insufficiently noticed by Harvard's historians that, before the College could put out so magnificently, it had first taken in. Thus, if Eliot was able to expand the elective offerings, it was because he first was financially able to expand his faculties. By contrast, Princeton and Yale remained plain and poor and other hopeful colleges more pinched and impecunious still.* Money, more money came the repeated cry. But the end was too often disappointment. Hence once

* In 1876 Gilman had estimated the property of Harvard College at more than five million dollars, that of Yale at about the same as the new Johns Hopkins University: three and a half million dollars. The income-yielding funds of Harvard were over three millions, those of Yale a million and a half. The annual revenues Gilman estimated at about \$387,000 for Harvard, \$200,000 for Johns Hopkins, while Yale's expenditures for its Academical Department were \$126,000.

By 1900 Harvard's funds had grown to thirteen millions, but Yale's only to five, a figure reached by Harvard in 1885. In 1888 Princeton's endowment was less than a million and a half.¹²

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again a gap between *need* and *demand*, between plans and their realization.

To sum up the analysis thus far: the university, it turned out, required a long list of ingredients, which were both expensive and hard to procure. It resulted that the public first had to be more thoroughly convinced and that the role of the university builders became not that of invention but of persuasion.

Hence the development of a peculiarly American ingredient: a special kind of university president. And the great president turned out to be not the leading scholar but the persuasive executive, not the man who imagined a new thing but the man who picked one or two needed ingredients or combinations of elements for special emphasis (viz., A. D. White and secular studies, Eliot and the elective system, Gilman and the graduate school, Angell and the high school certifying system) and then, in spite of all handicaps, somehow put them across.

RELATION OF COLLEGE TO UNIVERSITY

We come now to a fourth major consideration—in the course of this stiff and rather discouraging competition, there developed a split that was both geographic and social.

As the able historians of Wisconsin most persuasively set forth, the men of the West had inherited or brought with them or adopted a number of eighteenth-century and French ideas, to wit: that providing for higher education was a vital function of society, best exercised by the state through the establishment of a state institution, which should crown the system of public education and

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give a professional and practical as well as scholarly instruction to all those capable of benefiting from such training.¹³ Perhaps we should note also that these Westerners were less afraid of government; for the territory had made possible their settlements and the state government had given them home rule. The settlers, moreover, did not all acknowledge one church. It followed that the Western legislatures tended to by-pass the minority or denominational foundations and set up instead state universities which could be publicly controlled, secular and vocational and miscellaneous in their interests, democratic in their clientele.

All this had advantages and disadvantages. The advantages were the broad base, the wide interests, and the emotional appeal (at once sectional and democratic) against continued subservience to the intellectual aristocracy and religious interests of the East. The disadvantage was that the earlier denominational colleges were not used in the state system. Hence the almost cut-throat competition for public support in regions where the resources were public lands but the chief believers and supporters of higher education were often religiously minded men. Hence also a decided neglect of the humanities in the state universities. Hence finally the necessity of setting up undergraduate departments or schools without the alumni support, the traditions, the close-knit dormitory life and *esprit de corps* which had always characterized the English-style, New England or denominational, college.*

* It is one of William Rainey Harper's claims to remembrance that he tried to affiliate the existing colleges with Chicago, and in particular insisted on dividing his own undergraduate school into two years of academic college, two years of university college.

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Eventually dormitories or fraternity houses would be built, and football teams would give the state universities a rallying point for institutional enthusiasm. But the high mortality among the regular students, the presence of part-time or special students, and the lack of unity among the programs of study pursued made it difficult for these institutions to achieve that collegiate cohesion and togetherness which was so much cherished in the East.

Inevitably, too, the state universities took coloration from their surroundings. The boards of regents were sometimes politically unstable. Legislatures insisted that the endowment lands be sold, so as to encourage settlement. People generally seemed to expect to get into the university without training and to get out of it all sorts of things besides learning. In particular they expected the universities to help them to find a job and to make money. To many a voter his state university was a rainbow—with a pot of gold at the end of it.*

By contrast the Easterners seemed more afraid of the state. (Did they still remember the excesses of mob rule in the French Revolution?) In any case, they neither wished nor felt able to create a university outside of, or independent of, the established colleges. The colleges were too famous and too well equipped. Theirs was the

* What the same class of voter coveted from the venerable Eastern colleges was social prestige. President Grant tried to get both of these goods. And in 1869 the believers in higher education had the following newspaper paragraph to digest: "President Grant has gone to New England to put his son at college. The President wants to give his son a practical education, such that on graduating he will be able to earn a living in some other way than by schoolteaching." ¹⁴

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prestige. Theirs were the hard-won endowments. They controlled the supply of students and of tuitions. Theirs were the only graduates who had money and who cared. The colleges were also generators of moral force and purpose. They trained for character and judgment, believed in the individual, and clung to humanistic values in the face of the anonymous state. Incidentally, the older colleges had also begun to collect the museums and art galleries and observatories and laboratories and libraries and scholarships and professorships which would be indispensable to universities. So in the East it seemed natural and desirable to incorporate the old colleges in the new universities that were abuilding.

But this incorporation also had its disadvantages. For the college presidents were generally ministers, the college faculties were dominated by the classicists and disciplinarians, and the college alumni were unreasonably suspicious of innovation. Hence a serious problem existed in the East for the champions of the university idea. In this section of the country, accordingly, three solutions were tried. And I take as examples the cases of Johns Hopkins, Harvard, and Yale.

At Johns Hopkins a bequest of millions of dollars enabled a brand-new institution to be set up, with only a very subordinate college underneath. But failures in its railroad investments showed how precarious was the university's liberty. And in the long run the absence of a strong college to feed men and money into the higher faculty was to prove a formidable handicap.

At Yale the applied sciences grew up beside the College and presently were incorporated in a parallel undergraduate department, while the advanced studies were

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given an informal organization as a Department of Philosophy and the Arts. At Yale, that is, the problem was solved by creating new faculties and schools beside the College or above the College, leaving the College to continue the required curriculum for the B.A. degree. Theoretically this promised to create a very hopeful federation of equal and self-governing schools. But psychologically this federalization of the institution proved difficult of realization. In practice the officers of the College and Corporation could not bring themselves to regard the newer and more secular departments as of equal value. The students who came to the Scientific School proved somewhat less able and well prepared. The public demand for advanced instruction remained negligible. And the alumni found it hard to take the pursuit of research and the training of teachers seriously. Hence Yale College continued to get most of the support and prestige and money, the Graduate Department the neglect, and the Sheffield Scientific School much of the scorn. So for a long time Yale remained a very one-sided, divided, and unevenly developed place.

At Harvard, by contrast, Eliot early persuaded himself that the parallel department idea would not work. Hence the only thing to do was to put the newer and the higher studies into the College. Hence his championship of the elective system. And here a twentieth-century historian may be allowed a remark.

The elective principle was a beautiful instrument for a reformer. Electives promised freedom: freedom for students to choose their studies, freedom for teachers to teach in new ways. Meanwhile, the principle could be used for breaching the required curriculum and intro-

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ducing a few new subjects into the old-fashioned college at a time when the reformers were not yet strong enough to abolish all requirements or eliminate the "dead languages" at one blow.

Still more important, I think, was the tendency of the elective issue to unite the attackers but divide the defenders of the established order. The literary professor saw a chance to get out from under the grammarian; the scholar glimpsed emancipation from schoolteachers and disciplinarians. On the other hand, critics and innovators of the most variegated and unsympathetic kinds could get together. For by the elective system (and only by the elective system) could subjects with such clashing philosophies and methods as advanced physics and modern novels, appreciation of art and business administration, physical education and blacksmithing or agricultural chemistry, gain entrance together into the B.A. curriculum. In a word the elective system was secular and democratic, open without invidious distinctions to all the new interests of industrial America. A shrewder, more necessary weapon for "modernizing" the old College it would have been hard to find.

Now Eliot did not invent this instrument, nor first use it. On the contrary, Jefferson, Ticknor, Nott, and Wayland had all preceded him. And in his own time the Sheffield Scientific School, Cornell, and Johns Hopkins (and later Stanford) all used it. But they used it as a device for letting students with different interests choose *on entering* between specialist programs, each of which was drawn up and required by the professors in advance. Eliot, on the other hand, encouraged college men to choose *after entering* and to keep on electing—even

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when a few chose entirely one-sided programs, and the majority elected programs so scattered and capricious, or so elementary and easy, that neither discipline nor mastery were obtained.

On behalf of Eliot it may be observed that—after all the part-way compromises between idealism and necessity—his was a pragmatic solution which worked. Probably some measure of variation and student freedom was inevitable, if the colleges were not to reject the new knowledge entirely, and so disqualify themselves. As it was, the Eliot-sponsored system not only accommodated change but freshened the interest in undergraduate studies, helped raise American scholarship to the level of the European, and improved our graduate and professional education—no mean achievements.¹⁵ At Harvard in particular the success was spectacular, and the defects of unlimited application were postponed or disguised. Students, reputation, money all flowed in, and the University got its professional schools and its specialized faculty.

But for the undergraduates the reform resulted not so much in adding serious new programs of study as in breaking down the old curriculum and the old unity. Hence in the College the elective system meant not so much system as anarchy. Eliot believed in a variety of studies or sampling; but he thought that most of this sampling would be done in school; and in any case the sampling was designed not to give a student a broad general education but to enable him to find his interests and career. Inevitably this offended those who believed in a general education or a broad and humanistic training. And eventually the continued irresponsibility of the

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choosing would also offend those who desired systematic training in the newer and more practical subjects.

So broke out what can only be described as a great educational war. For places like Yale and Princeton wanted to create universities, but not by destroying the colleges. They wanted the university to rise out of the college, not drop into it like a bomb. They valued the general experience. They believed that the boys who came to them from many localities and backgrounds should live together, eat together, play together, and study together, share a common experience and common values, measure themselves against each other in a common competition. Education was more than just hand learning—or book learning either. It was a rounded experience which could draw the future leaders in the professions, politics, and business together into a group capable of giving the country a coherent leadership. “When nearly all the ship’s crew are aloft, setting the topsails, and catching the breezes, it is necessary there should be a steady hand at the helm”—so had warned the Yale Report of 1828.

But Eliot thought the country needed specialists more than a broadly educated leadership. So under him the achievement of the American university was to be purchased through, or at least accompanied by, the transformation of the college. Why the men of Harvard did not see what was threatened is not too easy to say. Perhaps we may believe that at Cambridge the family and regional traditions, together with the strong social and athletic life of the Yard, protected Harvard College from suffering the logical consequences of Eliot’s philosophy. And perhaps elsewhere the enthusiasm and antitradi-

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tionalism of the progressive school of education similarly blinded the later reformers to the risks.

Eventually the sons of Harvard and the disciples of John Dewey alike awoke to the fact that Eliot's elective system was no system at all, but a two-edged sword. And so belatedly they would follow Princeton and Yale, and many another more conservative institution, in the effort to reintroduce some system into what had come close to intellectual anarchy and chaos. And this in turn would lead back to the ideas of the old college unity—or at least to the effort to establish a new form of general education for citizenship—which is the quest that has preoccupied Amherst and Princeton and Yale, and Columbia and Chicago and Harvard, to say nothing of so many other colleges and universities in the past ten years.

If now we return and ask what in the nineteenth century was the American idea of a university, we can perhaps disengage out of the confusion some tentative answers.

First of all, the American university was not purely American. It was not even Anglo-American, a native superstructure imposed on the English foundation. For the basic English unit, as modified in the New World environment, proved inadequate to nineteenth-century needs. And only the knowledge of what the Continental universities had been, and a personal experience of what the German universities had become, can explain the additions and replacements by the reformers—their zeal for professional schools, their faith in the scientific method applied to learning, their desire for Ph.D.'s, their

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knowledge of so many techniques—in short, the way they built around and on top of and inside of or in place of the old-fashioned college.

At the same time our embryo universities reflected the unformed nation: its virtues, its uncertainties, its faults. For what could be more American than the optimism with which our colleges were carried to the frontier? What could be more characteristic than the boastfulness of so many grandiose schemes, or the wishful innocence which accepted the name for the substance, the degree for the education, the untried subject as the equal of century-old disciplines? Or what could be more beguiling than the enthusiasm for improvement, the glad faith that with education and good will society could surely lift itself onto a higher plane? Our universities were vehicles for promotion, an American self-hoisting machine. But they also mirrored American society in other ways. In them can be seen the growing scientism and specialization, the successive arrival of ideas from Europe, the late haste to catch up. In them stand revealed our diversities of origin, the conflict of codes and the struggle for social power, the confusion of standards together with a most beneficent broadening of opportunities.

In the third place, the history of our institutions of learning emphasizes with an unusual sharpness a cleavage in social attitudes, as shown most strikingly by the contrast between West and East. To identify these differences as a struggle between the Enlightenment and the Reformation would be to oversimplify. Yet in the Western state universities the dominance of eighteenth-century and Continental ideas seems unusually naked

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and powerful. Certainly the utilitarianism and equalitarianism, the magnificent optimism and the greater readiness to resort to the state as the agent of improvement are too plain to be overlooked. Ought we not to pay more attention to the eighteenth century—less to the frontier—in our interpretation of Western character?

In the East, by contrast, a seventeenth-century independence and moral earnestness gave intellectual character and a conservative stability through the most changeable times. In both areas it proved difficult to reconcile the free university with the disciplinary college. But in the Western universities the ideal of the college as a moral and social and intellectual community was pretty well given up in favor of a mixed set of programs that would accommodate both sexes and all kinds of studies. In the East, on the other hand, special efforts were made to achieve the new values without destroying the old. Women, for example, were given their own colleges, and the applied sciences often their separate polytechnic and engineering schools.*

A fourth and final commentary may be hazarded. In both areas the funds for a long time failed to come close to the hopes and public expectations. Yet as early as 1888 James Bryce could say that by and large the great universities of the East, and one or two in the West, were beginning to rival the ancient universities of Europe. For the money would come. And they had already what was better than funds—"an ardour and industry

* When the undergraduate enrollment got so large as to dissipate class loyalties, both Harvard and Yale later subdivided their colleges.¹⁶

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among the teachers which equals that displayed fifty years ago in Germany by the foremost men of the generation which raised the German schools to their glorious pre-eminence.”¹⁷ In both areas, too, the stronger institutions tended increasingly to attract the books and apparatus, the libraries and scholars and learned societies into their orbits, so that by the end of the century they were fast becoming the great centers of learning and investigation and new ideas. Oliver Wendell Holmes compared Cambridge to a watershed, draining a wide region of its talent. And Gilman likened the university to the sun, which would sooner or later attract the lesser planets into its system.¹⁸

This had not always been true abroad. And not in all respects was it an unmixed blessing here. University students lost communion with each other and with their inheritance. The teachers became separated and over-departmentalized, the graduate schools factories for more specialists, the universities filled with heterogeneous substances and tensions. And the public in turn felt losses with its gains. Our amateur guild of historians, for example, was taken over and professionalized by the universities and has since suffered a little from too close a bondage to the schoolmaster's and researcher's tasks. Yet other journalists and statesman-historians have fortunately arisen. Happily the domination of learning was never completed. With literacy well-nigh universal, with so many other agencies of education keeping open the channels of preferment, with the institutions of higher learning themselves so multitudinous and competitive, no real power monopolies developed, no university “trusts.” Not having captured all learning, they were

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themselves less in danger of capture. All in all, therefore, I think we may agree with Bryce that by the nineties the rising American universities, however diversified and competitive and imperfect, were indeed the most hopeful and healthy institutions in our materially progressive and still unregulated republic.

NOTES

1. D. G. Tewksbury, *The Founding of American Colleges and Universities before the Civil War* (New York, 1932), p. 28; *New York Times*, Oct. 13, 1948.

2. Reprinted by permission of Dodd, Mead & Company from *The Launching of a University and Other Papers* (New York, 1906; pp. 5–6) by Daniel Coit Gilman.

3. James Bryce, *The American Commonwealth* (New York, 1888), II, 529. Also George P. Schmidt, "Intellectual Crosscurrents in American Colleges, 1825–1855," *American Historical Review*, XLII (October, 1936), 46–67.

4. The English universities continued to inspire. For example, the Oxford-Cambridge preference for teaching over research strengthened the New England conservatives. Newman's idea of the university as an atmosphere influenced men like Hadley. English university architecture led Andrew D. White and the younger Timothy Dwight to insist that universities must have buildings commensurate with their dignity and importance. English sports inspired and helped shape American college athletics. And in the field of evolutionary thought English scholars were notably powerful. Nevertheless, through the nineteenth century as a whole, the English influence was distinctly secondary or traditional.

5. E. B. Wesley, *Proposed: The University of the United States* (Minneapolis, 1936).

6. C. W. Eliot, *A National University: Report Made . . . to the National Education Association . . . August 5, 1873* (Cambridge, 1874), p. 23. A. T. Hadley to John W. Hoyt, Washington, D.C., May 15, 1900, Hadley Papers in Sterling Memorial Library, Yale University.

7. T. J. Wertenbaker, *Princeton, 1746–1896* (Princeton, 1946), p. 304; Francis Wayland, *Report to the Corporation of Brown*

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University on Changes in the System of Collegiate Education (Providence, 1850), p. 57; C. L. Becker, *Cornell University: Founders and the Founding* (Ithaca, N.Y., 1944), p. 88; Henry James, *Charles W. Eliot, President of Harvard University, 1869-1909* (Boston, 1930), II, 88; and C. W. Eliot, "The New Education," *Atlantic Monthly*, XXIII (February, 1869), 216.

8. G. H. Nettleton, editor, *The Book of the Yale Pageant* (New Haven, 1916), pp. 131-132.

9. Wertenbaker, *Princeton*, p. 346.

10. Letter from Mr. Richard J. Storr of Bowdoin, January 31, 1950. I am indebted to Mr. Storr for permission to quote and for the helpful criticism which he has given to this paper.

11. *Addresses at the Inauguration of Daniel C. Gilman, as President of The Johns Hopkins University* (Baltimore, 1876), p. 9.

12. *Ibid.*, pp. 20-21; E. M. Norris, *The Story of Princeton* (Boston, 1917), p. 212.

13. Merle Curti and Vernon Carstensen, *The University of Wisconsin: A History* (Madison, Wis., 1949), I, 4-34.

14. Quoted in L. H. Bagg and H. A. Beers, *Valedictory Poem and Oration Pronounced . . . June 30, 1869* (New Haven, 1869), p. 27.

15. For a fuller analysis of the virtues and defects of the elective system, see G. W. Pierson, "The Elective System and the Difficulties of College Planning, 1870-1940," *The Journal of General Education*, IV (April, 1950), 165-174.

16. It may be added that despite all diversity there were signs toward the end of the century that the American universities were converging toward a common pattern. The Eastern universities were beginning to abolish compulsory chapel and trying to make their opportunities more widely democratic by increasing scholarships and self-help opportunities, by enlarging the enrollment, and by admitting women to particular programs. In turn, the Western universities were carrying their programs to a higher level of professional competence and beginning to look toward graduate work. Eventually there would also be a common tendency to divide college studies between the collegiate and the advanced. Our most famous colleges would tend to become semi-universities.

17. Bryce, *American Commonwealth*, II, 552-553.

18. Bagg and Beers, *Valedictory Poem*, p. 24; *Addresses at the Inauguration of Daniel C. Gilman*, p. 33.

Contemporary Universities:
Some Problems and Trends



THE invention of the century yardstick, that convenient means for dividing time, was a boon to students of history. Without it, fixing a starting point or an ending point to the study of any institution, in this case, of universities, would be difficult. But the century yardstick must be used with care: the whole is not necessarily seen in the yard, nor by examining only the yard can one be sure that the pattern begins or ends within its measure.

Consider, in general terms, contemporary universities. Learning power, teaching power, research power, purchasing power—those are their needs the world around. And those were their needs in the nineteenth century, with the exception of research power in the earlier part of that century.

Today, the first need among universities everywhere, though it has been less talked about and perhaps less thought about in America than in Europe, is learning power, which is native ability plus the will to learn. An able person, intellectually inquiring, reflective, and industrious—with learning power, and with leisure in the day after acquiring the necessities for life—can make himself educated, cultured, and wise in this era of free public libraries, museums, and archives. A great teacher

* President, Wellesley College.

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can speed the process. But if learning power is not there, the greatest teaching is only of partial value. A student cannot be lifted beyond the limits of his ability.

A great teacher may and often does inspire an individual student who heretofore has lacked the will or full opportunity to learn, and so sets the student on the road to education. But if large numbers of students arrive at the university without a solid academic foundation on which to build, the quality of university education must suffer. That problem causes anxiety today, everywhere, though in varying degrees.

Professors exiled from Germany in the days of Hitler, who have since returned, speak frequently of the thirst for knowledge among German youth. They speak also of the confusion of thinking, the weakness, as compared with former competence, in mathematical and linguistic tools, the large areas of ignorance and distortion resulting from unbalanced textbooks and inadequate libraries, and, added to those offspring of Nazi and war necessity, the effect upon morale of years of physical privation. Students are less well prepared, they say (hastening to qualify with numerous instances a dangerously large generalization).

Lacking the thorough preparatory work of the old gymnasias, too many German students need a slower pace at the universities than formerly. Nor have they, to the same degree as an earlier generation, the habit of open-mindedness in seeking truth, or faith in the value of such a habit. That should be temporary. But given the continued pall of fear and bitterness and given privation that makes the immediately useful all-important, speedy recovery of the universities in Germany is questionable.

CONTEMPORARY UNIVERSITIES

In Great Britain and America, where freedom of thought was never seriously curtailed and where varieties of opinion were easily heard, the problem of the mind stunted by government intent has not existed. But other factors in these countries have led to questions concerning the maintenance of student quality. Temporarily there was the problem of the veteran. The universities looked forward to their arrival with enthusiasm and, it must be admitted, with concern lest the veterans be unable to adapt to university procedures and ideals. Soon after they came, all alarm was dispelled. In its place grew admiration and respect for the remarkable industry and mature effectiveness of the veteran-student whose college or university education had been interrupted when war came.

Later, when veterans whose schooling had been broken off at an earlier level reached the universities after intensive, speeded-up preparatory courses, the situation changed somewhat. The ambition and drive were still there, but general information, competence from habit-forming practice in tool subjects and methodology, and experience in intellectual investigation beyond the fixed requirements had, in many instances, suffered from timesaving, semieducational short cuts. That, too, was a temporary problem, to be blamed on the war, not on the students, and was so recognized.

But it suggests an aspect of the problem of learning power which remains with us. So far as America is concerned, the issue was evident long before the 1940's, the war and the ensuing dangerous years serving only to speed its rate of growth. It stemmed from a wise insistence, voiced in nineteenth-century Britain as in

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America, on higher education for the many as a means to national welfare and even national preservation. Arguments used sixty years ago in behalf of widespread high school education in America, and used thirty years ago in behalf of widespread college education in America and of certain courses at such institutions as London University, are now heard relative to sending large numbers of students into most branches of advanced university study: such education is conducive to economic advancement, cultural enrichment, and responsible citizenship.

Those are sound arguments. But unless individual students have the ability and the will, in short, unless they have learning power, the ideal for individual and nation cannot be approached. It is not enough for the older generation to offer all young people two decades of schooling, or even sixteen years of it, unless it makes sure at every stage that students with learning power are neither held back by a slow pace nor unsoundly passed upward, and unless, somehow, young people see in education a right to be cherished, not a burden to be tolerated.

The problem would be minimal if there were sufficient teaching power to detect and meet the varied needs of college-age youth. There, again, a situation already evident in the 1920's and 1930's was aggravated but not created by the ensuing persecutions and war. In Europe many professors lost their lives. In America, and in Europe, war industries and government services absorbed many professorial skills, and with war's end not all professors found it easy or desirable to return to the university. And younger replacements, delayed by war, are only beginning their careers in 1950. This professorial

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shortage, coming at a time of peak enrollments, has created enormous difficulties. Pessimists declare that soon the only distinction between educational and other factories will lie in the lack of clarity as to the expected end product of the former.

Quality of teaching is talked of as much as the need for more teachers. As in the nineteenth century, great teaching is easily recognized, but little progress has been made in training for teaching on the university level. The fact is that educators do not agree on how to go about it. A few people urge teacher-training courses. More people oppose them. Instead, they suggest in-service training through practice and through visitations and advice. Even then they are aware of the danger of an older professor imposing his methods on a young instructor or of unconscious fostering of a deadly uniformity.

Teaching power, recognizable but not easily defined, seems to stem from the personality of the teacher, from all that he is and has experienced, from an innate gift for exposition which can be developed but not created, and from mastery of the subject. Teaching methods, consequently, are likely to differ among great teachers. That much was as clear to the nineteenth century as to the twentieth. But so general a definition of teaching power is no longer sufficient. In 1940 some European countries enrolled in universities as much as three per cent of their college-age population; America enrolled in colleges and universities approximately fifteen per cent of its youth. Since then, with the vast postwar registration in America and with a mounting demand from citizens and governments for still larger enroll-

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ments in this country and elsewhere, the development of teaching power as well as of numbers of teachers has become increasingly important.

A required course in methods of college teaching might be suggestive for prospective instructors. Most scholars concede that it would not hurt, unless it usurped time needed for mastery of subject matter. But at best, they say, given present knowledge of what constitutes great teaching, it would be little more than a gesture in face of criticism. The fairest hope seems to lie in the war-interrupted researches into the nature of good teaching, which faculties, educational associations, philanthropic foundations, and governments have undertaken at various times in the last fifty years. Such researches are slow-moving but hold promise. If the elements of good teaching could be more accurately isolated, careful experimentation might in time devise ways to detect those elements when screening prospective teachers and then might devise means to develop them.

Meanwhile, the conviction persists, stemming from nineteenth-century experience, which, in turn, was derived from earlier ages, that great teaching requires the impact of the teacher on the individual student, not on a mass of humanity. The practical conflict between that conviction, when the number of teachers is limited, and the conviction that higher education should be available to all who wish it is evident today.

One contrast between earlier nineteenth-century and twentieth-century ideas of the university lies in the changing attitude toward research. When transmission of culture was the one goal of the university, neither

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learning power nor teaching power was related to research power. But gradually in the nineteenth century the ideal of research in the universities, of adding there to the sum of human knowledge, spread across the world. Starting in Germany, it gained footholds throughout Europe; it had effect in Great Britain, first in the newer universities and then to a lesser degree in the older ones; and it led to the development of universities in America.

In that period advocates of universities as centers for the transmission of culture struggled actively against advocates of the newer ideal of universities as centers where additions to culture were to be made through scientific experiment. Neither side won wholly, and both ideals went on together into the twentieth century. Until mid-century the place of both in the university was rarely challenged, though steadily the prestige of research grew at the expense of teaching. Highest salaries and honors went for the most part to productive research scholars whose findings were more easily evaluated than was teaching power; and evidence of research power came to be a major prerequisite to appointment to most professorial chairs. Belief that research reinforced teaching was so common that it was axiomatic to say that a gifted teacher would lose his power if he did not continue with creative scholarship in his field.

Yet anyone familiar with universities could cite instances of the brilliant researcher who advanced the boundaries of knowledge in his field, but was incompetent in the classroom (a contention, also, of many nineteenth-century critics). He could cite instances of men with great teaching ability—who had become, at

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best, desultory research scholars. That gave rise in mid-century to a new and vigorous objection to emphasis in the universities on research for those who were to become teachers.

As yet the lines are not clearly drawn. Sometimes the argument seems to concern the narrowness of research problems set for prospective teachers in universities, not research per se. Sometimes opposition to research seems to be a rationalization, stemming not so much from principle as from the practical fact that adequate individual guidance in independent research is impossible with a high ratio of students to teachers.

Occasionally in America the suggestion is made that advanced research requiring elaborate and expensive equipment should be removed from the universities, because it must necessarily be financed by direct government and business subsidy, and in consequence must be subject to government and business control. Such action, some people suggest, would safeguard the freedom of the university from outside interference, while others counter that even more surely would it curtail the liberalizing aspects and the freedom of scientific inquiry.

More frequently discussion turns, gropingly, on how to maintain a more even balance between the two concepts of the function of a university—the transmission and the addition of knowledge—in an era when the advantages lie with the latter. Here, again, the war gave impetus to a discussion already commenced. Specialized research among communities of scholars had reached such extremes in America and on the continent that many scholars could not communicate. A common in-

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tellectual experience, which traditionally had provided educated men with a basis for unity among diversity, seemed to be disappearing. Had universities sacrificed intangibles for tangible rewards? The immediate issue was whether the new knowledge, gained through research, had heightened man's effectiveness in waging war without improving his ability to wage peace.

Universities, like other institutions in the 1940's, turned sharply self-critical. The values of scientific research were evident. But had they been allowed to push aside the values of philosophic education through liberal arts, which help to create the "whole man" who is as concerned with ends as with means? The answer at the moment seems to be in the affirmative. In consequence, widespread curricular reform is under way, especially on the undergraduate level in those American universities, and also in some German, Japanese, and other universities, where early and narrow specialization had been fostered in an effort to create research centers.

For the most part, the reforms now being tried turn back, by one route or another, to the concept of education through the liberal arts as the final stage in formal education for many and as a necessary preliminary to specialization in a profession. In America some colleges are developing integrating courses in general education that cut across various subjects. Others, fearing that the student may never learn to integrate for himself if too much of his education is preintegrated for him, are establishing area-distribution requirements, or even fixed course requirements. Still others are experimenting with new types of courses concerned with man's purposes and dealing with areas in which the citizen should function,

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without regard to traditional subject lines. The tendency in all of them seems to be to revert to earlier nineteenth-century concepts of broadly cultural education (concepts from which some American colleges and English universities had never departed) in order to end a divisive specialism in society and to strengthen in the individual knowledge of, and an effective sense of responsibility toward, society.

But no one idea of the good education dominates in the free parts of the world. Nor have research and specialization been dethroned in the universities. They have proved their worth and hold too much promise of contributing further to material well-being and to knowledge of man and the natural world. Modifications in universities to provide more liberalizing courses along with professional training are under consideration, however, as are broader courses for prospective teachers in colleges and universities, but their nature and effectiveness are not yet clear.

Learning power, teaching power, research power—those are the twentieth-century essentials. Given their existence, purchasing power is a necessary corollary for their development and use, but, without recognition of the importance of the first three powers, university purchasing power is a waste. Universities in the twentieth century, as in the nineteenth century, have insatiable financial appetites. Yet few of them have ever been extravagant. They need money as the child needs food—regularly, and in specially large quantities in stages of rapid growth. Find a university that does not need money, and you find a university that is sleeping.

Throughout most of the world the purchasing power

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of universities, as of other institutions, has been critically affected by the war and postwar inflation. In Germany centuries-old collections of priceless books and costly modern scientific instruments have been destroyed. Elsewhere through Europe destruction by war or bigotry has hit university possessions. Proud centers of learning, leaders of the intellectual world a few decades ago, have become desperate, struggling, marginal institutions. A strongly determined movement in western Europe seeks to restore them, but there is little money to replace equipment, to re-establish professors, to aid hungry students. In Russia, according to scattered reports, the war-interrupted movement to train able young party members is again proceeding, though the bulwarks of universities—academic freedom and student freedom of opinion—which never were firmly established there, are now destroyed.

In Great Britain the universities have resumed their accustomed rôle and go forward with a new exploratory vigor. There, as in America, higher education is being democratized by enlarged scholarship programs, by increased enrollments, especially in the newer universities, and by large-scale adult education programs. These latter, on both sides of the Atlantic, are still viewed with disdain in traditional circles, though they were in existence in the nineteenth century. But the rapidity of their growth in the twentieth century, and especially in this postwar period, attests to their value for the many people who could not or would not profit from the long discipline of continuous academic work.

Their merits are many, in spite of the fact that they can, under irresponsible leadership, turn into indoctrina-

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tion centers or adult play schools. They are flexible; courses can be established and withdrawn in response to popular interests without regard to degree examinations or credits. Men and women with limited formal education can get help in developing cultural understanding; people highly trained in one branch of learning can find general introductions to fields new to them; and those seeking new skills can get vocational and semivocational instruction. There is no dualism of purpose in these programs. They seek only to transmit cultural or technical knowledge in terms understandable to the layman. As such, they depart wholly from the aristocratic concept of educating the gentleman, from the intellectual concept of educating the ablest minds, and from the creative concept of adding to the sum of knowledge. They make the university not solely a community of scholars but a community of citizens. These adult education centers, together with the increasing opportunities through scholarships to partake of the formal disciplines leading to degrees, constitute the major twentieth-century deviations from nineteenth-century university practices, though not from ideas which found occasional expression in the nineteenth century.

Such democratization of universities is costly. Most individuals cannot afford higher education, and private philanthropy cannot support it for vast numbers. Governments must foot the bill. On the continent and in England that presents little ideological difficulty, because the authority, even the duty, of government to control universities in the interests of the nation has long been accepted, as has government support. But to-

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day European governments have not the money, and higher educational opportunities are, in fact, for the few.

In America government support presents relatively small practical difficulty, because state and federal governments seem to have access to money. But the ideological difficulty for the privately endowed universities is enormous. It stems from the long heritage of individualism in America, of belief in the importance of freedom from government control in every aspect of thought, and of pride in the independent status of the privately controlled institution. Yet already most independent universities accept from government large slices of their annual budgets to support research, and most of them, eying the wealthy, growing state universities, stand ready to accept more, if offered, and to accept scholarship aid. They need the support; their hope is to get it under conditions that will leave intact their self-control. But while government may choose not to exercise control, the power and, in theory, the right to control will be surrendered, as in the case of state universities, in proportion to the aid received.

Presumably government aid to education will increase markedly in every country, given a period of peace, with America taking the lead. It is also probable that variety in higher education will persist, particularly in America where there has never been coherence of educational thought, where there is money for experiment, and an enthusiasm for anything new. State-supported universities, colleges, junior colleges, and adult education centers are likely to grow by leaps and bounds, thereby helping to meet the need of a democracy for an informed citizenry and for competent leadership. Heav-

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ily endowed independent colleges together with the heavily endowed liberal arts colleges of the big private universities are likely to maintain their strength, and to continue to serve as standard bearers of academic freedom, of student freedom of opinion, of academic excellence, and of broad, scholarly humanism as the foundation both of community and vocational responsibility. (Whether they will succeed in defining their purpose more specifically than that or than they did in the nineteenth century is an open question.) And the graduate schools of the private universities, with government assistance, will continue to contribute to the increase and the interpretation of knowledge.

Twentieth-century universities, children of nineteenth-century universities, have found that the crises and horrors and perils of their times have heightened their problems and forced on them an awareness of the importance of solution. But neither the problems nor the currently proposed answers are new. What is new simply adds to proof of the fact that universities, like every other institution, are so much a part of the pattern of society at any one time that it is impossible to note where their influence on society ends and society's influence on them commences.

What is new is the shift in the center of university power and influence from Europe to the United States—along with the transferral of almost every other form of power and influence; the almost frantic insistence of universities, of governments, and of peoples for education to define itself and to hurry up and accomplish all that nineteenth-century optimists promised—an outgrowth of the contemporary sense of the peril to civiliza-

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tion of philosophical drifting; and the emphatic demand for widespread higher education—evidence of the growth of democracy and of leisure, and more important, of the existence of at least one commonly held positive conviction: democracy must survive.

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